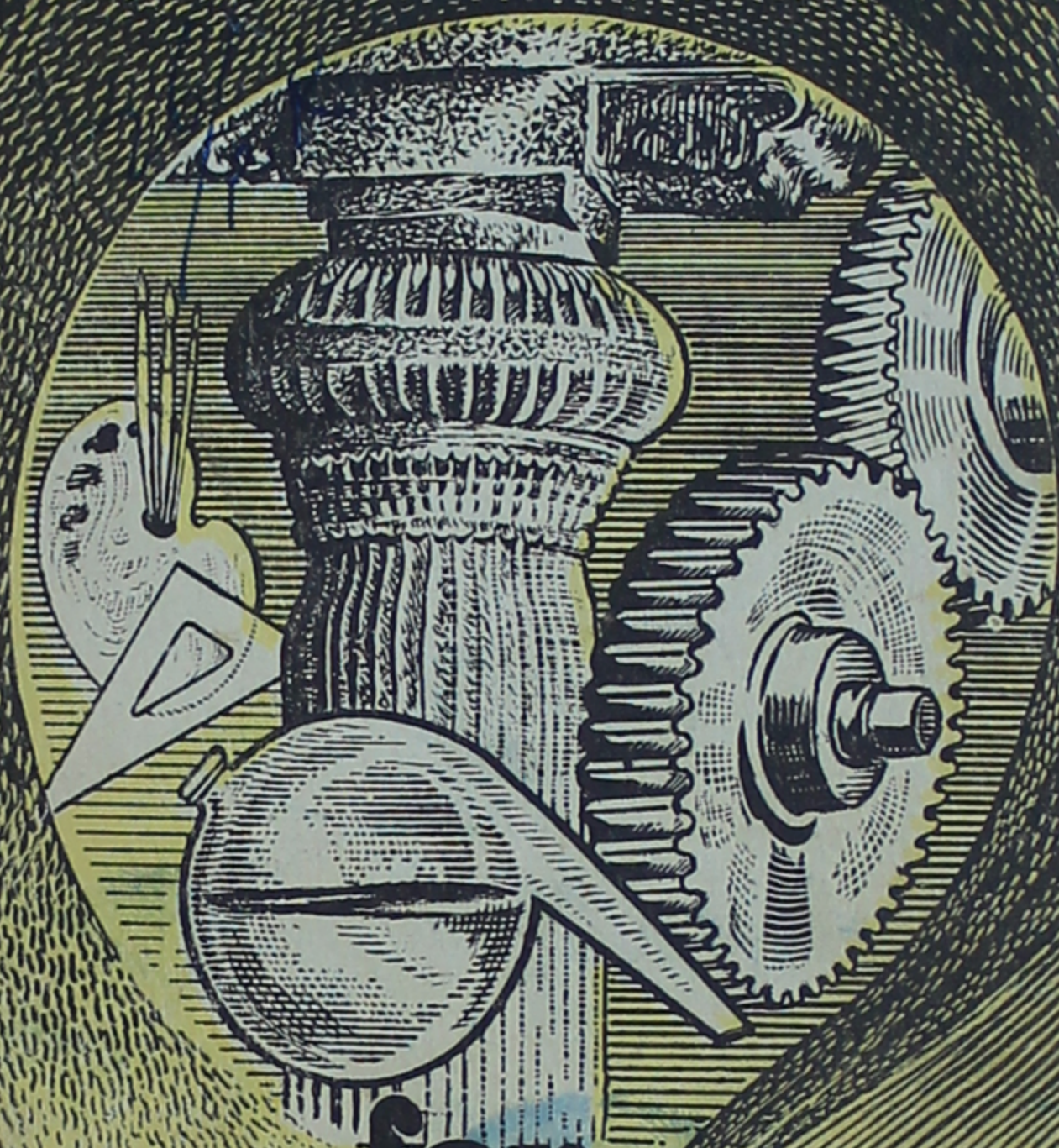


FACILITIES



for

TECHNICAL
EDUCATION



MINISTRY OF
EDUCATION

in India

GOVERNMENT OF INDIA

Ministry of Education

BUREAU OF EDUCATION (INDIA)

PAMPHLET—52

FACILITIES FOR TECHNICAL EDUCATION IN INDIA

**Preliminary report on the survey of Technical
Institutions in India conducted by the All-
India Council for Technical Education**

Part I



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PREFACE

The All-India Council for Technical Education, which has been set up to advise the Government of India on all matters concerning higher technical education, decided, at its first meeting held in May 1946, to carry out a comprehensive survey of the existing facilities and future requirements of the country in the field of technical education. This survey will be conducted, in due course, by the Regional Committees of the Council when set up and will provide the latest information concerning technical education in all its aspects.

2. The present report on the facilities for technical education available in India is the result of a limited survey undertaken by the Co-ordinating Committee of the All-India Council for Technical Education with a view to strengthening some of the existing institutions as a preliminary measure to meet the pressing demand for technical personnel. The information contained herein is mainly derived from the replies to a questionnaire which was issued in September 1946 to all technical institutions except those concerned with the training of artisans only. Some of the more important institutions were subsequently visited by Committees appointed by the All-India Council for Technical Education to obtain first hand information in regard to the scope and standard of instruction, the teaching staff, equipment, accommodation, etc.

3. Replies to the questionnaire, a copy of which appears in Appendix A, have been received from a majority of the institutions invited to provide data. This report covers ninety-five institutions offering various courses in Technology, Engineering, Art, Architecture and Commerce, and although by no means exhaustive or complete, attempts to present a fairly comprehensive picture of the existing facilities and should prove useful to educational officers and others interested in technical education.

4. Part I of the report deals with the grouping of the institutions by zones and their subdivision by type under each zone, the salient features of the survey, and broad outlines of the facilities for technical education now available in India.

Part II is devoted to individual institutions.

Part III contains comparative statements showing existing physical facilities, relative cost of education, working week per session, etc. etc.

Part IV contains salient features of Development Plans.

Appendix A reproduces the questionnaire referred to in the foregoing paragraphs.

5. The Council is deeply indebted to the various institutions, universities and Provincial and State Governments who have co-operated in supplying information and to the staff of the Ministry of Education, Government of India, for compiling and arranging the materials furnished.

6. The information contained in this publication was collected over a period of two years, and although it has been comparatively recently checked up in respect of several institutions it is not claimed that this compilation is up-to-date in all respects. It is hoped that any shortcomings in this publication will be treated with indulgence and the institutions concerned will kindly notify any errors and omissions which they may come across so that they may be rectified in the next edition. A work of this type is likely to become out of date soon and it is therefore proposed to bring out revised editions at regular intervals. It will be appreciated if heads of Institutions will promptly notify any additions and alterations that may become necessary from time to time.

S. R. SEN GUPTA,

Secretary,

All-India Council for Technical Education.

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PART I

CHAPTER I

Short summary of facilities in India

In India, facilities for technical education are provided in universities and a number of technical, art, commerce and vocational institutions. It is the purpose of this report to provide, in a convenient form, particulars of the more important institutions providing courses in Engineering and Technological subjects, Art, Architecture and Commerce and to present a co-ordinated picture of the present-day facilities in these subjects.

India has, for the purpose of this report, been divided into four regions, viz., the Northern, the Southern, the Eastern and the Western regions—the demarcation of the regions being as follows:—

(i) *The Northern Region*—comprising the East Punjab, Delhi, the United Provinces, Ajmer-Merwara, the Kashmir and Jammu States and the States of East Punjab and Rajputana.

(ii) *The Southern Region*—comprising Madras and the States of Mysore, Travancore, Cochin, Hyderabad (Deccan) and other Southern India States.

(iii) *The Eastern Region*—comprising West Bengal, Assam, Bihar, Orissa and the Eastern States.

(iv) *The Western Region*—comprising Bombay, the Central Provinces and Berar and the Western India and Central India States.

A list of the ninety-five institutions which have supplied the requisite information in reply to a questionnaire (Appendix A), issued in September 1946, is given at the end of this chapter. The institutions have been classified as follows:—

(i) Engineering and Technological Institutions.

(ii) Art and Architectural Institutions.

(iii) Commerce Institutions.

The Institutions falling in each of the above classes have been further categorised into the following four groups according to the type of facilities primarily offered by them:—

(i) *Group 'A'*—

Institutions falling in this group provide facilities mainly for post-graduate and research work in addition to any other facilities that may be available.

(ii) *Group 'B'*—

Institutions in this group offer primarily degree or equivalent courses. General admission qualification is Intermediate with science, or its equivalent e.g., Pre-Engineering; and the duration of courses ranges from three to four years.

(iii) *Group 'C'*—

Institutions in this group offer primarily diploma or equivalent courses with Matriculation as the admission qualification.

(iv) *Group 'D'*—

Institutions in this group provide certificate or equivalent courses. The minimum admission qualification is the 7th standard of a High School.

The regional distribution of institutions is shown groupwise in the following tables :—

TABLE I—ENGINEERING AND TECHNOLOGICAL INSTITUTIONS

Region	Type of institution	Group of institution			
		'A'	'B'	'C'	'D'
Northern . . .	Residential	4	4	3	1
	Partly-residential . . . .	...	1	6	1
	Non-residential . . . .	...	...	...	1
Southern . . .	Residential	1	5	...	...
	Partly-residential	2	2	...	...
	Non-residential . . . .	...	3	12	...
Eastern	Residential . . . .	...	2	1	...
	Partly-residential . . . .	...	2	4	...
	Non-residential	1	...	1	...
Western	Residential . . . .	...	...	1	1
	Partly-residential	2	2	3	...
	Non-residential . . . .	...	...	1	5

TABLE II—ART AND ARCHITECTURE INSTITUTIONS

Region	Type of institution	Group of institution			
		'A'	'B'	'C'	'D'
Northern . . .	Residential . . . .	...	...	...	1
	Partly-residential . . . .	...	1	1	...
	Non-residential . . . .	...	...	...	...
Southern . . .	Residential . . . .	...	...	...	...
	Partly-residential . . . .	...	...	1	...
	Non-residential . . . .	...	...	...	1

Region	Type of institution	Group of institution			
		'A'	'B'	'C'	'D'
Eastern . . .	Residential . . .	...	...	...	...
	Partly-residential . . .	...	...	...	...
	Non-residential . . .	...	1	...	...
Western . . .	Residential . . .	...	...	...	...
	Partly-residential . . .	...	...	1	...
	Non-residential . . .	...	1	...	...

TABLE III—COMMERCE INSTITUTIONS

Region	Type of institution	Group of institution			
		'A'	'B'	'C'	'D'
Northern . . .	Residential . . .	1	2	...	...
	Partly-residential . . .	...	2	...	...
	Non-residential . . .	...	...	...	...
Southern . . .	Residential . . .	...	1	...	...
	Partly-residential . . .	...	...	1	...
	Non-residential . . .	...	...	1	...
Eastern . . .	Residential . . .	...	...	...	...
	Partly-residential . . .	...	3	...	...
	Non-residential . . .	...	...	1	...
Western . . .	Residential . . .	...	1	...	...
	Partly-residential . . .	4	1	...	...
	Non-residential . . .	...	...	...	...

It will be observed from the foregoing tables that Engineering and Technological Institutions are mostly concentrated in the Southern Region, Art and Architecture institutions in the Northern and the Southern Regions; and Commerce institutions in the Western Region.

The ninety-five institutions covered by this report provide facilities in twenty-six branches of study in Engineering and Technology, Art, Architecture and Commerce. The following table gives the regional distribution of institutions subjectwise.

TABLE IV

Serial No.	Subject	Number of institutions in				Total
		Northern Region	Southern Region	Eastern Region	Western Region	
1	Aeronautical Engineering .	...	2	...	...	2
2	Automobile Engineering .	2	3	...	2	7
3	Chemical Engineering .	...	5	1	2	8
4	Civil Engineering . .	4	15	6	4	29
5	Electrical Engineering .	3	14	4	5	26
6	Electrical and Mechanical Engineering (Combined).	6	...	2	1	9
7	Highway Engineering .	...	3	...	...	3
8	Internal Combustion Engineering.	...	1	...	...	1
9	Mechanical Engineering .	5	15	3	9	32
10	Naval Architecture . .	...	1	...	...	1
11	Radio Engineering . .	1	1	...	...	2
12	Tele-communication .	...	1	...	...	1
13	Mining	1	1	1	...	3
14	Metallurgy	1	1	1	...	3
15	Geology	1	1	1	...	3
16	Applied Physics . .	...	1	1	...	2
17	Chemical Technology .	4	4	1	4	13

Serial No.	Subject	Number of institutions in				Total
		Northern Region	Southern Region	Eastern Region	Western Region	
18	Cinematography and Sound Technology.	...	2	...	...	2
19	Fisheries Technology and Navigation.	...	3	...	...	3
20	Leather Technology .	1	2	...	2	5
21	Printing Technology .	...	3	...	...	3
22	Sugar Technology .	1	...	...	...	1
23	Textile Technology .	4	5	2	3	14
24	Art	3	3	1	2	9
25	Architecture . . .	1	...	...	2	3
26	Commerce . . .	5	3	4	6	18

It will be seen that the Southern Region has the largest number of technical institutions and facilities in the following subjects are at present available in that region only :—

1. Aeronautical Engineering
2. Highway Engineering
3. Naval Architecture
4. Internal Combustion Engineering
5. Tele-communications
6. Cinematography and Sound Technology
7. Fisheries Technology and Navigation
8. Printing Technology.

Likewise the Northern Region only provides facilities in " Sugar Technology ".

Brief particulars of courses of study in the above subjects together with the names of the institutions at which these are available, are given below :—

AERONAUTICAL ENGINEERING

(1) INDIAN INSTITUTE OF SCIENCE, BANGALORE

and

(2) COLLEGE OF ENGINEERING (VIZAGAPATAM), COCONADA.

The Indian Institute of Science offers—

- (a) An Associateship Course (A.I.I.Sc.) of $2\frac{1}{2}$ years' duration. Admission qualification—B.Sc. (Hons.) with Physics or D.I.I.Sc. Number of admissions—three students each year.
- (b) A diploma course (D.I.I.Sc.) of 2 years' duration. Admission qualification—Bachelor of Engineering degree. Number of admissions—ten students each year.

The College of Engineering (Vizagapatam), Coconada is a newly started college under the Madras Government and is affiliated to the Andhra University. The institution offers a degree course of 4 years' duration. Admission qualification—Intermediate in Science. 150 students are admitted each year to all engineering courses including Aeronautical Engineering. The course is still in the formative stage.

HIGHWAY ENGINEERING

- (1) COLLEGE OF ENGINEERING (VIZAGAPATAM), COCONADA.
- (2) COLLEGE OF ENGINEERING, GUINDY, MADRAS.
- (3) ENGINEERING COLLEGE, ANANTPUR, MADRAS.

All the above institutions offer degree courses of 4 years' duration. Admission qualification—Intermediate in Science. Annual intake of the institutions for all engineering subjects is 105, 124 and 50 respectively.

NAVAL ARCHITECTURE

THE COLLEGE OF ENGINEERING (VIZAGAPATAM), COCONADA offers a 4 years' degree course. Admission qualification—Intermediate in Science. The course is still in the formative stage.

INTERNAL COMBUSTION ENGINEERING

THE INDIAN INSTITUTE OF SCIENCE, BANGALORE, offers a diploma course of 2 years' duration. Admission qualification—graduate in Mechanical Engineering. The course is still in the formative stage. Annual intake is 8.

TELE-COMMUNICATION ENGINEERING

THE COLLEGE OF ENGINEERING, GUINDY, MADRAS, offers a degree course of 4 years' duration. Admission qualification—Intermediate in Science. Twenty students are taken in every year.

CINEMATOGRAPHY AND SOUND TECHNOLOGY

(1) SRI JAYACHAMARAJENDRA OCCUPATIONAL INSTITUTE, BANGALORE

(2) GOVERNMENT SCHOOL OF TECHNOLOGY, BROADWAY, MADRAS.

The Sri Jayachamarajendra Occupational Institute offers (a) a diploma course of 3 years' duration and (b) a certificate course of 2 years' duration. The admission qualification for both the courses is S.S.L.C. and the annual intake is fifteen students for each course.

The Government School of Technology, Madras, offers a diploma course of 4 years' duration. Admission qualification—I.Sc. or I.A. (with Science). Number of admissions—thirteen students each year.

FISHERIES TECHNOLOGY AND NAVIGATION

(1) GOVERNMENT SCHOOL OF TECHNOLOGY, MADRAS,

(2) ANDHRA POLYTECHNIC, COCONADA, and

(3) CENTRAL POLYTECHNIC, MADRAS,

The Government School of Technology, Madras offers a diploma course of 4 years' duration. Admission qualification—S.S.L.C. The number of annual admission to this course is not known separately, but the total intake of the school, for all the engineering and technological courses offered, is 103.

The Andhra Polytechnic, Coconada and the Central Polytechnic, Madras both offer a diploma course of 3 years' duration. Admission qualification—S.S.L.C. Annual intake—twenty in each institution.

PRINTING TECHNOLOGY

(1) GOVERNMENT SCHOOL OF TECHNOLOGY, MADRAS.

(2) SRI JAYACHAMARAJENDRA OCCUPATIONAL INSTITUTE, BANGALORE and

(3) CENTRAL POLYTECHNIC, MADRAS.

The Government School of Technology, Madras, offers diploma courses of 4 and 5 years' duration; the 5 years' course being a part-time course. Admission qualification—S.S.L.C.

Sri Jayachamarajendra Institute offers a diploma course of 3 years' duration and a certificate course of 2 years' duration. The admission qualification is S.S.L.C. for both the courses. Number of admissions—ten students per year for each course.

The Central Polytechnic which is one of the six Polytechnics recently started by the Government of Madras offers a diploma course of 3 years' duration. Admission qualification—S.S.L.C. Annual intake—twenty.

SUGAR TECHNOLOGY

THE INDIAN INSTITUTION OF SUGAR TECHNOLOGY, KANPUR, provides facilities for the following courses :—

(a) One year's Fellowship course in Sugar Technology (F.I.I.S.T.)

(b) One year's Fellowship course in Sugar Engineering (F.I.I.S.E.)

- (c) An Associateship course of 3 years' duration in Sugar Technology (A.I.I.S.T.)
- (d) An Associateship course of 2½ years' duration in Sugar Engineering (A.I.I.S.E.)
- (e) A Certificate course of one year's duration in Sugar Engineering.
- (f) A Certificate course of one year's duration in Sugar Boiling.
- (g) Short Certificate courses of four to eight months' duration in Sugar Chemistry, Pan-boiling and Statistics, etc.

The admission qualifications for the above courses are respectively—

- (a) A.I.I.S.T.
- (b) A.I.I.S.E.
- (c) B.Sc.
- (d) B.E.
- (e) Diploma in Engineering.
- (f) I.Sc.
- (g) Matric to M.Sc. according to the course.

The annual intake for the courses is 4 for (a) ; 3 for (b) and 12 each for (c) to (f) and 50 for (g)

SUBJECTS FOR WHICH FACILITIES ARE AVAILABLE IN MORE THAN ONE REGION (cf TABLE IV).

AUTOMOBILE ENGINEERING

Northern Region —(1) GOVERNMENT METAL WORK INSTITUTE, AMBALA CITY. The institute offers a diploma course of 4 years' duration. The admission qualification is Matriculation. The number of annual admission to this course is not known separately but the total intake in respect of all the subjects taught at the institute is 25.

(2) TECHNICAL COLLEGE, DAYALBAGH, AGRA. The institute offers a certificate course of 2 years' duration. The admission qualification is Matriculation and the annual intake 25.

Southern Region.—(1) ARTHUR HOPE COLLEGE OF TECHNOLOGY, COIMBATORE. The institute offers a degree course of 4 years' duration. The admission qualification is I.A. with Science. The number of annual admission to the course is not known separately but the total intake of the college for all the Engineering and Technological subjects offered is 96.

(2) DRAVIDA POLYTECHNIC, MADURA.

(3) KARNATAKA POLYTECHNIC, MANGALORE.

The above Polytechnics offer a 3 years' diploma course. Admission qualification—S.S.L.C. Annual intake to each institution is twenty.

Western Region.—(1) GOVERNMENT ENGINEERING SCHOOL, NAGPUR. The institution offers a diploma course of 3 years' duration. The minimum qualification for admission is H.S.L.C. Number of admissions—10 students per year.

(2) F. S. PAREKH TECHNICAL INSTITUTE, SURAT. The institute offers a certificate course of 3 years' duration. The annual intake is 15 and the admission qualification is Vth standard of a High School

CHEMICAL ENGINEERING

Northern Region.—Nil.

Southern Region.—(1) THE ALAGAPPA CHETTIAR COLLEGE OF TECHNOLOGY, MADRAS UNIVERSITY, offers a degree course of $2\frac{1}{4}$ years' duration. The admission qualification is B.Sc. and the annual intake is 19.

(2) THE DEPARTMENT OF ENGINEERING AND TECHNOLOGY, ANNAMALAI UNIVERSITY, ANNAMALAINAGAR, offers a 4 years' degree course. The minimum admission qualification is I.Sc. and the annual intake is 28.

(3) THE COLLEGE OF ENGINEERING, BANGALORE, offers a degree course of $4\frac{1}{2}$ years' duration. The admission qualification is I. Sc. and the total annual intake for all the courses of studies offered by the College is 170.

(4) THE INDIAN INSTITUTE OF SCIENCE, BANGALORE, offers a diploma course of 3 years' duration. The admission qualification is B.Sc. (Hons.) and the annual intake is 10.

(5) THE KERALA POLYTECHNIC, CALICUT, offers a diploma course of 3 years' duration. The admission qualification is S.S.L.C. Annual intake—twenty.

Eastern Region.—COLLEGE OF ENGINEERING AND TECHNOLOGY, JADAVPUR, WEST BENGAL, offers a degree course of 4 years' duration. The admission qualification is I.Sc. Number of admissions—70 students per year.

Western Region.—(1) THE DEPARTMENT OF CHEMICAL TECHNOLOGY, BOMBAY UNIVERSITY, offers a degree course 2 years' duration. The admission qualification is B.Sc. Number of admissions—16 students per year.

This institution also offers a post-graduate course of one year's duration. The admission qualification is B.Sc. (Tech.)

(2) THE LUXMINARAYAN INSTITUTE OF TECHNOLOGY, NAGPUR, offers a degree course of 2 years' duration. The admission qualification is B.Sc. Number of admissions—10 students per year.

The institute also offers a post-graduate course for which the admission qualification is B.Sc. (Tech.)

CIVIL ENGINEERING

Northern Region —(1) COLLEGE OF ENGINEERING AND TECHNOLOGY, MUSLIM UNIVERSITY, ALIGARH, offers (a) a degree course of 4 years' duration and (b) a diploma course of the same duration. The minimum qualification for admission is I.Sc. for (a) and Matriculation for (b). The annual intake is 96 and 54 respectively.

(2) THOMSON COLLEGE OF ENGINEERING, ROORKEE, offers (a) a senior diploma course of 3 years' duration and (b) a junior diploma (overseer) course of 2 years' duration. The admission qualifications are I.Sc. or Pre-Engineering for (a) and H.S.L.C. for (b). The annual intake is 30 and 4 students respectively.

(3) THE CIVIL ENGINEERING SCHOOL, LUCKNOW, offers a diploma course of 2 years' duration. The admission qualification is H.S.L.C. Number of admissions—90 students per year.

(4) THE ENGINEERING COLLEGE, LUDHIANA (EAST PUNJAB), offers a certificate course of 3 years' duration. The admission qualification is M.S.L.C.

Southern Region —Five out of the fifteen institutions in this region which offer courses in Civil Engineering (cf. Table IV) are newly started Madras Government Polytechnics. These are :—

- (1) A. G. POLYTECHNIC, VUYYUR.
- (2) ANDHRA POLYTECHNIC, COCONADA.
- (3) CENTRAL POLYTECHNIC, MADRAS.
- (4) DRAVIDA POLYTECHNIC, MADURA.
- (5) KARNATAKA POLYTECHNIC, MANGALORE.

The above mentioned Polytechnics offer a diploma course of 3 years' duration, for which the admission qualification is S. S. L. C. Annual intake is twenty to each institution.

(6) DEPARTMENT OF ENGINEERING AND TECHNOLOGY, ANNAMALAI UNIVERSITY. The institution offers a degree course of 4 years' duration. Admission qualification—I.Sc. Number of admissions—50 students per year. This institution also offers a diploma course of 2 years' duration. The admission qualification for this course is S.S.L.C. and the annual intake is 79.

- (7) ARTHUR HOPE COLLEGE OF TECHNOLOGY, COIMBATORE.
- (8) COLLEGE OF ENGINEERING, GUINDY, MADRAS.
- (9) COLLEGE OF ENGINEERING (VIZAGAPATAM), COCONADA.
- (10) ENGINEERING COLLEGE, ANANTPUR.

The four institutions mentioned above offer degree courses of 4 years' duration. The admission qualification is I. A. with Science in each case. The total annual intake of the institutions for degree courses in all engineering subjects is 96, 124, 105 and 50 respectively.

The College of Engineering, Guindy, also offers a diploma course of 4 years' duration. The admission qualification is S.S.L.C. and the annual intake is 90.

(11) COLLEGE OF ENGINEERING, BANGALORE. The institution offers a degree course of $4\frac{1}{2}$ years' duration. The admission qualification is I.Sc. and the total annual intake, for all the courses of studies offered by the College, is 170.

(12) COLLEGE OF ENGINEERING, TRAVANCORE. The institution offers a degree course of 5 years' duration. The admission qualification is I.Sc. and the annual intake is 34. The college also offers a diploma course of 3 years' duration. The admission qualification for this course is E.S.L.C. and the annual intake is 34.

(13) OSMANIA ENGINEERING COLLEGE, HYDERABAD (DECCAN). The institution offers a degree course of $3\frac{1}{2}$ years' duration. The admission qualification is I.Sc.

(14) SRI JAYACHAMARAJENDRA OCCUPATIONAL INSTITUTE, BANGALORE. This institute offers (a) diploma course of 3 years' duration and (b) a certificate course of 2 years' duration. The admission qualification is S. S. L. C. and the annual intake is 30 for each course.

(15) GOVERNMENT SCHOOL OF TECHNOLOGY, MADRAS. The institution offers a diploma course of 4 years' duration. The minimum admission qualification is S.S.L.C. The total annual intake for all the courses of studies offered by the institution is 103.

Eastern Region.—(1) THE BENGAL ENGINEERING COLLEGE, SIBFORE, HOWRAH (WEST BENGAL), offers a degree course of 4 years' duration. The admission qualification is I.Sc. and the annual intake is 72.

(2) THE BIHAR COLLEGE OF ENGINEERING, PATNA, offers (a) a degree course of 5 years' duration and (b) a 4 years' diploma course. The admission qualifications for the courses are I.Sc. and Matriculation respectively. The total annual intake is 71 for the Civil Engineering and the Electrical Engineering degree courses, and 122 for the diploma course in Civil Engineering.

(3) THE COLLEGE OF ENGINEERING AND TECHNOLOGY, JADAVPUR (WEST BENGAL), offers a diploma course of 3 years' duration. The admission qualification is Matriculation and the annual intake is 40.

(4) THE CALCUTTA TECHNICAL SCHOOL, CALCUTTA, mainly caters for apprentices of certain factories and workshops in and around Calcutta. The School offers a diploma course in Plumbing and Sanitary Engineering of 4 years' duration. The minimum admission qualification is Matriculation or Junior Cambridge Certificate. Number of admissions—4 students per year.

(5) THE CALCUTTA ENGINEERING COLLEGE, BALLYGUNGE, offers (a) a diploma course of 3 years' duration and (b) a certificate course of 3 years' duration. The minimum admission qualification is Matriculation for (a) and Xth standard of High School for (b) and annual intake is 40 and 12 respectively.

(6) THE ORISSA SCHOOL OF ENGINEERING, CUTTACK, offers a diploma course of 4 years' duration, Matriculation as the admission qualification. Number of admissions—40 students per year.

Western Region.—(1) THE COLLEGE OF ENGINEERING, POONA, offers (a) a degree course of $3\frac{1}{2}$ years' duration and (b) a diploma course of 3 years' duration. The admission qualifications are I.Sc. and Matriculation respectively. The annual intake is 105 for the degree course and 100 for the diploma course.

(2) THE VICTORIA JUBILEE TECHNICAL INSTITUTE, BOMBAY, offers a diploma course in Civil and Sanitary Engineering of 4 years' duration. Admission qualification—An entrance examination of Matriculation standard. I. Scr. are exempted from the test. Number of admissions—10 students per year.

(3) THE GOVERNMENT ENGINEERING SCHOOL, NAGPUR, offers a diploma course of 3 years' duration with H. S. L. C. as the admission qualification. Number of admissions—30 students per year.

(4) THE KALABHAVAN TECHNICAL INSTITUTE, BARODA, offers a 3 years' diploma course. The admission qualification is Matriculation and the annual intake is 25.

ELECTRICAL ENGINEERING

Northern Region.—(1) THE COLLEGE OF ENGINEERING AND TECHNOLOGY, MUSLIM UNIVERSITY, ALIGARH, offers (a) a degree course in Electrical Engineering of 4 years' duration and (b) a diploma course of the same duration. The minimum admission qualifications are I.Sc. for (a) and Matriculation for (b) and the annual intake is 50 and 13 respectively.

(2) THE THOMASON COLLEGE OF ENGINEERING, ROORKEE, offers a diploma course in Electrical Engineering of 3 years' duration. The minimum admission qualification is I.Sc. or Pre-Engineering. The total annual intake for the Electrical Engineering and the Mechanical Engineering courses is 32.

(3) THE DELHI POLYTECHNIC, DELHI, offers (a) an All-India Diploma course of 4 years' duration and (b) an All-India Certificate Course (Part-time) of 3 years' duration. The admission qualifications are I.Sc., or Pre-Engineering for (a) and Matriculation for (b). The annual intake is 40 and 33 respectively.

Southern Region.—Four out of the fourteen institutions in this region which offer courses in Electrical Engineering are newly started Madras Government Polytechnics. These are :—

- (1) ANDHRA POLYTECHNIC, COCONADA.
- (2) CENTRAL POLYTECHNIC, MADRAS.
- (3) DRAVIDA POLYTECHNIC, MADURA.
- (4) KERALA POLYTECHNIC, CALICUT.

The above-mentioned polytechnics offer a diploma course of 3 years' duration for which the admission qualification is S. S. L. C. Annual intake to each institution is 20.

(5) THE DEPARTMENT OF ENGINEERING AND TECHNOLOGY, ANNAMALAI UNIVERSITY, offers a degree course of 4 years' duration. The admission qualification for this course is I.Sc., and the annual intake is 30.

- (6) COLLEGE OF ENGINEERING, GUINDY, MADRAS.
- (7) COLLEGE OF ENGINEERING (VIZAGAPATAM), COCONADA.
- (8) ENGINEERING COLLEGE, ANANTPUR, MADRAS.
- (9) ARTHUR HOPE COLLEGE OF TECHNOLOGY, COIMBATORE.

The four institutions mentioned above offer degree courses in Electrical Engineering of 4 years' duration. The admission qualification is I. A. with science. The total annual intake of the institutions for degree courses in all Engineering subjects is 124, 105, 50 and 96 respectively.

(10) THE COLLEGE OF ENGINEERING, BANGALORE, offers a degree course in Electrical Engineering of $4\frac{1}{2}$ years' duration. The admission qualification is I.Sc. and the total annual intake for all the courses of studies offered by the college, is 170.

(11) THE COLLEGE OF ENGINEERING, TRAVANCORE, offers (a) a degree course of 5 years' duration and (b) a diploma course of 3 years' duration. The admission qualification is I.Sc. for (a) and E. S. L. C. for (b). The annual intake is about 8 students for each course.

(12) THE INDIAN INSTITUTE OF SCIENCE, BANGALORE, offers an advanced diploma course in Electrical Technology of 3 years' duration. The admission qualification is B.Sc. (Hons. I) or B. E. and the annual intake is 30.

(13) SRI JAYACHAMARAJENDRA OCCUPATIONAL INSTITUTE, BANGALOR offers (a) a diploma course of 3 years' duration and (b) a certificate course of two years' duration. The admission qualification in each case is S. S. L. C. and the annual intake is 20 students for each course.

(14) THE GOVERNMENT SCHOOL OF TECHNOLOGY, MADRAS, offers a diploma course of 4 years' duration. The admission qualification is S. S. L. C. and the annual intake is 79.

Eastern Region.—(1) THE BENGAL ENGINEERING COLLEGE, SIBPUR, HOWRAH, offers a degree course of 4 years' duration. The admission qualification is I.Sc. and the annual intake is 26.

(2) THE COLLEGE OF ENGINEERING AND TECHNOLOGY, JADAVPUR, CALCUTTA, offers a degree course of 4 years' duration. The admission qualification is I.Sc. and the annual intake is about 60.

(3) THE BIHAR COLLEGE OF ENGINEERING, PATNA, offers a 4 years' degree course. The admission qualification is I.Sc. and the annual intake for both the Civil and the Electrical Engineering degree courses is 71.

(4) THE CALCUTTA TECHNICAL SCHOOL, CALCUTTA, offers a diploma course of 5 years' duration. The minimum educational qualification for admission is Matriculation or Junior Cambridge Certificate. This institution mainly caters for apprentices of certain workshops and factories in and around Calcutta.

Western Region.—(1) VICTORIA JUBILEE TECHNICAL INSTITUTE, BOMBAY. The institute offers a 4 years' diploma course. The admission qualification is a pass in an Entrance Test of Matriculation standard, I.Sc. passed students are exempted from the entrance test, and the annual intake is 60.

(2) KALABHAVAN TECHNICAL INSTITUTE, BARODA. The institute offers a diploma course of 4 years' duration. The admission qualification is Matriculation and the annual intake is 25.

(3) SIR CUSROW WADIA INSTITUTE OF ELECTRICAL TECHNOLOGY, POONA. The institute offers a diploma course of 3 years' duration. The minimum educational qualification for admission is Matriculation and the annual intake is 40.

(4) MORVI TECHNICAL INSTITUTE, MORVI, KATHIAWAR. The institute offers a diploma course of 3 years' duration. The admission qualification is VIIth standard of High School and the combined annual intake for the Electrical and the Mechanical Engineering courses offered by the institute is 20.

(5) R. C. TECHNICAL INSTITUTE, AHMEDABAD. The institute offers a diploma course, the duration of which is 3 years for full-time students, and 4 years for part-time students. The annual intake is 10 and 20 respectively. Non-Matrices are admitted to the course.

ELECTRICAL AND MECHANICAL ENGINEERING (COMBINED COURSES)

Northern Region.—(1) ENGINEERING COLLEGE, BANARAS HINDU UNIVERSITY, BANARAS. The college offers a degree course of 5 years' duration. The admission qualification is I.Sc. and the annual intake is 140.

(2) TECHNICAL COLLEGE, DAYALBAGH, AGRA. The college offers a diploma course of 4 years' duration. The admission qualification is Matriculation with science and the annual intake is 25.

(3) GOVERNMENT TECHNICAL INSTITUTE, GORAKHPUR. The institute offers a diploma course of 3 years' duration. The admission qualification is H. S. L. C., and the annual intake is 30.

(4) GOVERNMENT TECHNICAL INSTITUTE, JHANSI. The institute offers a diploma course of 5 years' duration. The course is run on 'Sandwich' system and is specially meant for G. I. P. Rly. apprentices. The admission qualification is Matriculation and the annual intake ranges from 20 to 28.

(5) GOVERNMENT TECHNICAL INSTITUTE, LUCKNOW. The institute, offers a diploma course of 5 years' duration—almost half of this time is spent in practical training. The admission qualification is Matriculation and the annual intake is 34.

(6) TECHNICAL COLLEGE, JODHPUR. The college offers a certificate course of 5 years' duration. The admission qualification is Matriculation.

Southern Region.—Nil.

Eastern Region.—(1) KANCHRAPARA TECHNICAL SCHOOL, KANCHRAPARA, WEST BENGAL. The school caters mainly for apprentices of the B. & A. Rly., (now part of E. I. Rly.), and offers a certificate course of 5 years' duration. The admission qualification is Matriculation and the annual intake about 16.

(2) CALCUTTA ENGINEERING COLLEGE, BALLYGUNGE, CALCUTTA. The college offers (a) a diploma course of 3 years' duration and (b) a certificate course of 2 years' duration. The admission qualifications are Matriculation for (a) and Xth standard of High School for (b) and the approximate annual intake is 90 and 38 respectively.

*Western Region.—*THE COLLEGE OF ENGINEERING, POONA. The college offers a diploma course of 4 years' duration. The admission qualification is Matriculation and the annual intake is about 76.

The college also offers a degree course of $3\frac{1}{2}$ years' duration. The admission qualification is I.Sc. Annual intake is 50.

MECHANICAL ENGINEERING

Northern Region —(1) THE COLLEGE OF ENGINEERING AND TECHNOLOGY, MUSLIM UNIVERSITY, ALIGARH, offers (a) a degree course of 4 years' duration and (b) a diploma course of the same duration. The admission qualification is I.Sc. for (a) and Matriculation for (b) and the annual intake is 22 and 12 respectively.

(2) THE THOMASON ENGINEERING COLLEGE, ROORKEE, offers a diploma course of 4 years' duration. The admission qualification is I.Sc. or Pre-Engineering. The Combined annual intake for the Mechanical and the Electrical Engineering Courses is 32.

(3) THE GOVERNMENT METAL WORKS INSTITUTE, AMBALA CITY (EAST PUNJAB), offers a diploma course of 4 years' duration. The admission qualification is Matriculation and the annual intake is 25.

(4) THE GOVERNMENT TECHNICAL INSTITUTE, LUCKNOW, offers a certificate course of 3 years' duration in light machine Engineering. The admission qualification is VIIIth standard of high school and the annual intake is 9.

(5) THE RAMPUR GOVERNMENT POLYTECHNIC, RAMPUR, UNITED PROVINCES, offers a certificate course of 3 years' duration. The admission qualification is VIIIth standard of High School and the annual intake is 21.

Southern Region.—Six out of the fifteen institutions in this region offering facilities for training in Mechanical Engineering are newly started by Madras Government Polytechnics. These are :—

- (1) A. G. POLYTECHNIC, VUYYUR.
- (2) ANDHRA POLYTECHNIC, COCONADA.
- (3) CENTRAL POLYTECHNIC, MADRAS.
- (4) DRAVIDA POLYTECHNIC, MADURA.
- (5) KERALA POLYTECHNIC, CALICUT.
- (6) KARNATAKA POLYTECHNIC, MANGALORE.

The above-mentioned Polytechnics offer a diploma course of 3 years' duration for which the admission qualification is S.S.L.C. The annual intake to each institution is twenty.

(7) SRI JAYACHAMARAJENDRA OCCUPATIONAL INSTITUTE, BANGALORE. The institute offers (a) a diploma course of 3 years' duration, and (b) a certificate course of 2 years' duration. The admission qualification is S.S.L.C., and the annual intake is 20 for each course.

(8) GOVERNMENT SCHOOL OF TECHNOLOGY, BROADWAY, MADRAS. The school offers a diploma course of 4 years' duration. The admission qualification is S.S.L.C., and the annual intake is 62.

(9) DEPARTMENT OF ENGINEERING AND TECHNOLOGY, ANNAMALAI UNIVERSITY. The institution offers a degree course of 4 years' duration. The admission qualification is I.Sc. and the annual intake is 20.

(10) COLLEGE OF ENGINEERING, GUINDY, MADRAS.

(11) COLLEGE OF ENGINEERING (VIZAGAPATAM), COCONADA.

(12) ENGINEERING COLLEGE, ANANTPUR, MADRAS.

The above-mentioned institutions offer degree courses of 4 years' duration. The minimum admission qualification is I. A. with Science. The total annual intake of the institutions for degree courses in all Engineering subjects is 124, 105, and 50 respectively.

(13) COLLEGE OF ENGINEERING, BANGALORE. The college offers a degree course of $4\frac{1}{2}$ years duration. The admission qualification is I.Sc. and the total annual intake for all the courses of studies offered by the College is 170.

(14) COLLEGE OF ENGINEERING, TRAVANCORE. The college offers a 5 years' degree course. I.Sc. is the admission qualification. In addition, the college offers a 3 years' diploma course for which the admission qualification is E.S.L.C. The annual intake is eight students for each course.

(15) OSMANIA ENGINEERING COLLEGE, HYDERABAD (DECCAN). The college offers a degree course of $3\frac{1}{2}$ years' duration. The admission qualification is I.Sc. and the annual intake is 55.

Eastern Region:

(1) THE BENGAL ENGINEERING COLLEGE, SIBPUR, offers a degree course of 4 years' duration. The admission qualification is I.Sc. Annual intake is 28.

(2) THE COLLEGE OF ENGINEERING AND TECHNOLOGY, JADAVPUR, offers (a) a degree course of 4 years' duration, and (b) a diploma course of 3 years' duration. The admission qualification is I. Sc. for (a) and Matriculation for (b). The annual intake is 160 and 75 respectively.

(3) THE CALCUTTA TECHNICAL SCHOOL, CALCUTTA, offers a diploma course of 5 years' duration. The minimum educational qualification for admission is Matriculation or Junior Cambridge Certificate. Annual intake is 159. The school mainly caters for apprentices of certain factories in and around Calcutta.

Western Region.—(1) VICTORIA JUBILEE TECHNICAL INSTITUTE, BOMBAY. The institute offers (a) a 4 years' diploma course, and (b) a 2 years' certificate course (Part-time). The admission qualification is an admission test of Matric standard. [I.Sc. passed students are exempted from the test for (a)] and Matriculation for (b). The annual intake is 60 and 80 respectively.

(2) KALABHAVAN TECHNICAL INSTITUTE, BARODA. The institute offers a diploma course of 4 years' duration. The admission qualification is Matriculation and the annual intake is about 25.

(3) GOVERNMENT ENGINEERING SCHOOL, NAGPUR. The school offers a diploma course of 3 years' duration. The admission qualification is H.S.L.C. and the annual intake is 15.

(4) R. C. TECHNICAL INSTITUTE, AHMEDABAD. The institute offers (a) a diploma course of 3 years' duration, and (b) a part-time diploma course of 4 years' duration. Non-Matrices are admitted to both the courses and the annual intake is 30 and 15 respectively.

(5) MORVI TECHNICAL INSTITUTE, MORVI, KATHIAWAR. The institute offers a diploma course of 3 years' duration. The admission qualification is VIIth standard of High School and the combined annual intake for the Mechanical and the Electrical Engineering courses offered by the institute is 20.

(6) O'BRIEN TECHNICAL INSTITUTE, KOLHAPUR. The institute offers a diploma course of 4 years' duration. Non-Matrices are admitted to the course. Number of admissions—15 students per year.

(7) F. S. PAREKH TECHNICAL INSTITUTE, SURAT. The institute offers a certificate course of 3 years' duration. The admission qualification is VIIth standard of High School and the annual intake is 15.

(8) SCHOOL OF INDUSTRY, RATANGIRI. The institute offers (a) a certificate course in Mechanical apprenticeship of 2 years' duration and (b) a certificate course of 3 years' duration in Carpentry 'A' course. The admission qualification is VIIth standard of High School in each case and the annual intake is 8 and 20 respectively.

(9) GOVERNMENT SCHOOL OF INDUSTRY, SATARA CITY. The institute offers a certificate course in Carpentry 'A' of 3 years' duration. The admission qualification is VIIth standard of High School and the annual intake is 10.

The courses offered by the last two institutions are artizan courses.

RADIO ENGINEERING

Northern Region.—RAMPUR GOVERNMENT POLYTECHNIC, RAMPUR. Particulars of the course offered by the institution are not available.

Southern Region.—SRI JAYACHAMARAJENDRA OCCUPATIONAL INSTITUTE, BANGALORE. The institute offers (a) diploma course of 3 years' duration, and (b) a certificate course of 2 years' duration. The admission qualification is S.S.L.C. and the annual intake is 15 for each course.

Eastern Region.—Nil.

Western Region.—Nil.

MINING

Northern Region.—COLLEGE OF MINING AND METALLURGY, BANARAS. The college offers (a) a degree course of 4 years' duration, and (b) a research degree course of 3 years' duration. The admission qualification is I.Sc. for (a) and B.Sc. (Mining) for (b). The annual intake for the degree course is 16.

Southern Region.—SRI JAYACHAMARAJENDRA OCCUPATIONAL INSTITUTE, BANGALORE. The Institute offers a certificate course of 2 years' duration. Admission qualification is S.S.L.C. and the annual intake is 30.

Eastern Region.—INDIAN SCHOOL OF MINES, DHANBAD. The institute offers (a) a certificate course of 4 years' duration, and (b) an associateship course of 5 years' i.e., lasting for one year after qualifying for the certificate. The admission qualification is I.S. and the combined annual intake for both the Mining and Geology courses is 24.

Western Region.—Nil

METALLURGY

Northern Region.—COLLEGE OF MINING AND METALLURGY, BANARAS. The college offers (a) degree course of 4 years' duration, and (b) a research degree course of 3 years' duration. Admission qualification is I.Sc. for (a) and B.Sc. (Met) for (b). The annual intake for the degree course is 26.

Southern Region.—INDIAN INSTITUTE OF SCIENCE, BANGALORE. The institute offers an advanced diploma course in Metallurgy of 3 years' duration, half of which period is to be devoted to advanced study and research. The admission qualification is B.Sc. (Hons. I).

Eastern Region.—BENGAL ENGINEERING COLLEGE, SIBPUR (WEST BENGAL). The college offers a degree course in Metallurgy of 4 years' duration. The admission qualification is I.Sc. and the annual intake is 6.

Western Region.—Nil.

APPLIED PHYSICS

Northern Region.—Nil.

Southern Region.—JEYPORE VIKRAMA DEO COLLEGE OF SCIENCE AND TECHNOLOGY, ANDHRA UNIVERSITY, WALTAIR. The college offers (a) a degree course of 3 years' duration, and (b) a post-graduate course of one years' duration. The admission qualification is I.Sc. for (a) and B.Sc. for (b). The annual intake for the degree course is 12. There are also facilities for a research degree course.

Eastern Region.—THE DEPARTMENT OF APPLIED PHYSICS, UNIVERSITY COLLEGE OF SCIENCE AND TECHNOLOGY, CALCUTTA UNIVERSITY, offers a post-graduate degree course of 2 years' duration. The admission qualification is B.Sc. and the annual intake is 20. The institute also offers research degree courses.

Western Region.—Nil.

CHEMICAL TECHNOLOGY

Northern Region.—(1) COLLEGE OF TECHNOLOGY, BANARAS HINDU UNIVERSITY, BANARAS. The college offers (a) degree courses of 3 years' duration in Industrial Chemistry, Glass, Ceramics, and Pharmaceutics, (b) post-graduate degree course of 2 years' duration in Industrial Chemistry

and (c) a post-graduate degree course of one year's duration in Pharmaceutics. The admission qualification is I. Sc. for (a), B. Sc. (Ind. Chem.) for (b) and B. Pharm. for (c). The annual intake is 60 students for (a); and 3 students for (b). The institution also offers research degree courses in Industrial Chemistry and Glass Technology.

(2) HARCOURT BUTLER TECHNOLOGICAL INSTITUTE, KANPUR. The institute offers (a) a fellowship course in Chemical research of 4 years' duration, (b) an associateship course in chemical research of 2 years' duration, (c) 2 years' associateship and fellowship courses in Oil Chemistry and Technology and (d) short courses of 8—10 months' duration in oil milling, soap making and paints and varnishes. The admission qualification is B.Sc. for all the courses, and the annual intake is 1, 6, 31+2 and 16 respectively.

(3) DELHI POLYTECHNIC, DELHI. The institution offers an All-India Diploma Course of 5 years' duration. The admission qualification is I. Sc. or Pre-Engineering and the annual intake is 16.

(4) GOVERNMENT CENTRAL TEXTILE INSTITUTE, KANPUR. The institute offers (a) a 4-year diploma course and (b) a two years' certificate course in Textile Chemistry only. The admission qualification is H. S. E. passed or equivalent for (a) and H. S. E. standard for (b). The combined annual intake in textile technology and textile chemistry is 47 and 7 respectively.

Southern Region.—(1) INDIAN INSTITUTE OF SCIENCE, BANGALORE. The institute offers associateship courses in various branches of pure and applied chemistry of $2\frac{1}{2}$ years' duration (5 terms). The admission qualification is B.Sc. (Hons. I) and the annual intake is 25.

(2) JEYPORE VIKRAMADEO COLLEGE OF SCIENCE AND TECHNOLOGY, WALTIAK, ANDHRA UNIVERSITY. The college offers (a) a degree course of 3 years' duration in Foods and Drugs and General Chemical Technology. (b) a post-graduate degree course in Foods and Drugs and General Chemical Technology of 2 years' duration and (c) a research degree course of 3 years' duration in Foods and Drugs and General Chemical Technology. The admission qualifications are I. Sc. for (a), B. Sc. for (b) and M. Sc. (Chem. Tech.) for (c). The annual intake is 24 for (a), and 6 for (b) and (c) combined.

(3) INSTITUTE OF TEXTILE TECHNOLOGY, TRIVANDRUM. The institute offers a 4-year diploma course in Textile Chemistry. The admission qualification is E. S. L. C. and the annual intake is 12.

(4) KERALA POLYTECHNIC, CALICUT. The institution offers a diploma course in Chemical Technology of 3 years' duration. The admission qualification is S. S. L. C. Annual intake is twenty.

Eastern Region.—THE DEPARTMENT OF APPLIED CHEMISTRY, UNIVERSITY COLLEGE OF SCIENCE AND TECHNOLOGY, CALCUTTA UNIVERSITY, offers (a) a post-graduate degree course in Applied Chemistry of two years' duration; and (b) a diploma course of one year's duration in Soap Technology. The admission qualification is B. Sc. for both (a) and (b) and the annual intake is 18 and 10 respectively. The institution also offers research degree courses in applied chemistry.

Western Region.—(1) THE DEPARTMENT OF CHEMICAL TECHNOLOGY, UNIVERSITY OF BOMBAY, offers degree courses of 2 years' duration in (a) Textile Chemistry, (b) Pharmaceutics and Fine Chemicals, (c) Foods and Drugs, (d) Technology of Intermediates, (e) Plastics, Paints and Varnishes and (f) Oils and Fats etc. The admission qualification is B.Sc. and the annual

intake is 16, 12, 10, 12, 6 and 8 respectively. Besides these courses, M.Sc. (Tech.) and Ph.D. degree courses are also offered to the graduates of the institution.

(2) THE LUXMINARAYAN INSTITUTE OF TECHNOLOGY, NAGPUR UNIVERSITY, NAGPUR, offers a degree course of 2 years' duration in Oil Technology. The admission qualification is B.Sc. and the annual intake is 9. Besides this course, the institute offers a post-graduate research degree course to its graduates.

(3) THE KALABHAVAN TECHNICAL INSTITUTE, BARODA, offers a diploma course of 3 years' duration. The admission qualification is Matriculation and the annual intake is 25.

(4) THE VICTORIA JUBILEE TECHNICAL INSTITUTE, BOMBAY, offers a diploma course in Applied Chemistry and Chemical Technology of 4 years' duration. The admission qualification is a Pass in an entrance test of Matriculation standard. I.Sc. passed students are exempted from the test and the annual intake is 20.

LEATHER TECHNOLOGY

Northern Region.—THE TECHNICAL COLLEGE, DAYALBAGH, AGRA, offers a certificate course of 2 years' duration. The admission qualification is VIIth standard of high school and the annual intake is 10.

Southern Region.—(1) THE ALAGAPPA CHETTIAR COLLEGE OF TECHNOLOGY, UNIVERSITY OF MADRAS, offers a degree course of $2\frac{1}{2}$ years' duration. The admission qualification is B.Sc. and the annual intake is 6.

(2) THE INSTITUTE OF LEATHER TECHNOLOGY, MADRAS, offers (a) a diploma course of 4 years' duration and (b) a certificate course of 3 years' duration. The admission qualification is S.S.L.C. for (a) and V standard of high school for (b). The annual intake is 12 and 8 respectively.

Western Region.—(1) GOVERNMENT LEATHER WORKING SCHOOL, BANDRA, BOMBAY. The school offers a diploma course of 2 years' duration. The admission qualification is Matriculation and the annual intake is 5.

(2) THE GOVERNMENT TANNING INSTITUTE, BANDRA, BOMBAY. The institute offers a diploma course of 2 years' duration. The admission qualification is Matriculation and the annual intake is 5.

TEXTILE TECHNOLOGY

Northern Region.—(1) DELHI POLYTECHNIC, DELHI. The institute offers (a) a diploma course of $3\frac{1}{2}$ years' duration and (b) a certificate course of 3 years' duration. The admission qualification is Matriculation for both the courses and the annual intake is 13 and 12 respectively.

(2) GOVERNMENT CENTRAL TEXTILE INSTITUTE, KANPUR. The institute offers (a) a diploma course of 4 years' duration and (b) a junior course of 2 years' duration. The admission qualification is H. S. E. passed for (a) and H. S. E standard for (b). The combined annual intake in Textile Chemistry and Textile Technology is 47 and 7 respectively.

(3) GOVERNMENT CENTRAL WEAVING INSTITUTE, BANARAS, CANTT. The institute offers a diploma course of 3 years' duration in weaving. The admission qualification is Matriculation and the annual intake is 20.

(4) PUNJAB INSTITUTE OF TEXTILE TECHNOLOGY, AMRITSAR. The institute offers a diploma course in Textile Technology of 3 years' duration. The admission qualification is Matriculation or equivalent and the annual intake is 20.

Southern Region.—(1) ALAGAPPA CHETTIAR COLLEGE OF TECHNOLOGY, MADRAS. The college offers a degree course of $2\frac{1}{2}$ years' duration in Textile Technology. The admission qualification is B.Sc. and the annual intake is 6.

(2) ARTHUR HOPE COLLEGE OF TECHNOLOGY, COIMBATORE. The college offers a degree course of 4 years' duration. The admission qualification is I. A. with science. The annual intake is 96 for all the courses of study offered by the institute, including Textile Technology.

(3) SRI KRISHNA RAJENDRA SILVER JUBILEE TECHNOLOGICAL INSTITUTE, BANGALORE. The institute offers (a) degree course of $3\frac{1}{2}$ years' duration and (b) a diploma course of $2\frac{1}{2}$ years' duration. The admission qualification is I. Sc. for (a) and E. S. L. C. for (b) and the annual intake is 15 to 25 and 11 to 15 respectively.

(4) INSTITUTE OF TEXTILE TECHNOLOGY, TRIVANDRUM. The institute offers a diploma course of 4 years' duration. The admission qualification is E. S. L. C. and the annual intake is 12.

(5) GOVERNMENT TEXTILE INSTITUTE, MADRAS. Particulars of the courses offered by the institute are not available.

Eastern Region.—(1) BENGAL SILK TECHNOLOGICAL INSTITUTE, BERHAMPORE, BENGAL. The institute offers a diploma course in silk Technology of 3 years' duration. The admission qualification is Matriculation and the annual intake is 19.

(2) BENGAL TEXTILE INSTITUTE, SERAMPORE, HOOGHLY. The institute offers a diploma course of 3 years' duration. The admission qualification is Matriculation and the annual intake is 40 to 50.

Western Region.—(1) VICTORIA JUBILEE TECHNICAL INSTITUTE, BOMBAY. The institute offers (a) a degree course in Textile Technology of 4 years' duration, and (b) a diploma course of the same duration. The admission qualification is I. Sc. for (a) and a pass in an entrance test of Matriculation standard for (b). I. Sc. passed students are exempted from the test and the annual intake is 10 and 40 respectively. In addition to courses (a) and (b) the institute offers a certificate course of 2 years' duration for which the admission qualification is Matriculation and the annual intake is 21.

(2) KALABHAVAN TECHNICAL INSTITUTE, BARODA. The institute offers a diploma course in Weaving Technology of 3 years' duration. The admission qualification is Matriculation and the annual intake is 25.

(3) R. C. TECHNICAL INSTITUTE, AHMEDABAD. The institute offers a certificate course in Weaving and Spinning of 3 years' duration. The admission qualification is Vth standard of high school. Number of admissions—40 students per year.

GEOLGY

Northern Region.—DEPARTMENT OF GEOLOGY, BANARAS HINDU UNIVERSITY, BANARAS. The institution offers (a) a post-graduate degree course in Geology of 2 years' duration, and (b) a degree course of the same duration. The admission qualification is B.Sc. (Geology) for (a) and I.Sc. for (b). The annual intake is 25 and 80 respectively.

In addition to the above courses the institution offers a research degree course for which the admission qualification is M.Sc. degree in Geology. Number of admissions—2 students per year.

Southern Region.—(1) ERSKINE COLLEGE OF NATURAL SCIENCE, ANDHRA UNIVERSITY, WALT AIR. The college offers (a) a two-year degree course, (b) a 3-year Honour's degree course, and (c) a post-graduate degree course of one to two years' duration. The admission qualification is I. Sc. for (a) and (b) and B. Sc. for (c) 2 years' course and B. Sc. (Hons.) for (c) one years' course. The annual intake is 18, 8 and 6 respectively.

In addition to the above-mentioned courses there is a research degree course of 3 years' duration with M. Sc. as the admission qualification. Number of admissions—6 students per year:

Eastern Region.—THE INDIAN SCHOOL OF MINES, DHANBAD, BIHAR, offers (a) a certificate course of four years' duration, and (b) an associateship course of 5 years' duration, i.e., lasting for one year after the certificate. The admission qualification is I. Sc. The combined annual intake for both Mining and Geology courses is 24.

Western Region.—Nil.

ARCHITECTURE

Northern Region.—DELHI POLYTECHNIC, DELHI. The institution offers (a) an All-India Diploma course in Architecture of 6 years' duration and (b) a part-time All-India Certificate course of the same duration. The admission qualification is Matriculation or equivalent and the annual intake is 12 in each case.

Southern Region.—Nil.

Eastern Region.—Nil.

Western Region.—(1) SIR J. J. SCHOOL OF ARTS, BOMBAY. The school offers a diploma course of 5 years' duration. The admission qualification is Matriculation and the annual intake is 30.

(2) KALABHAVAN TECHNICAL INSTITUTE, BARODA. The institute offers a diploma course of 4 years' duration. The admission qualification is Matriculation and the annual intake is 5.

ARTS

Northern Region.—(1) DELHI POLYTECHNIC, DELHI. The institution offers (a) an All-India Diploma Course of 5 years' duration, and (b) an All-India Certificate course (part-time) of the same duration. The admission qualification is Matriculation in either case and the annual intake is 6 and 9 respectively.

(2) GOVERNMENT SCHOOL OF ARTS AND CRAFTS, LUCKNOW. The school offers (a) a diploma course of 5 years' duration in various branches of Applied Art, and (b) a certificate course of 2 years' duration for teachers of drawing. The admission qualification is IVth standard of school with ability to draw for (a) and H. S. E. passed for (b). The annual intake is 32 and 8 respectively.

(3) GOVERNMENT TECHNICAL INSTITUTE, LUCKNOW. The institute offers a certificate course in Painting of 3 years' duration. Admission qualification—should be literate. Number of admissions—10 students per year.

Southern Region.—(1) CENTRAL SCHOOL OF ARTS AND CRAFTS, HYDERABAD (DECCAN). The school offers diploma courses of 5 years' duration in

Painting and Sculpture. The admission qualification is VIIIth standard of high school with Inter Drawing Certificate. Number of admissions—10 students per year.

(2) H. H. THE MAHARAJA'S SCHOOL OF ARTS, TRAVANCORE. The school offers certificate courses of 4 years' duration in (a) Drawing and Painting, (b) Clay Modelling. The annual intake is 14 and 4 respectively.

(3) THE SCHOOL OF ARTS AND CRAFTS, MADRAS. The school offers a certificate course of 2 years' duration. Admission qualification is IVth standard of high school, and the annual intake is 25.

Eastern Region.—GOVERNMENT SCHOOL OF ARTS, CALCUTTA. The school offers a diploma course of 5 years' duration. The admission qualification is Matriculation or equivalent, and the annual intake is 50.

Western Region.—(1) SIR J. J. SCHOOL OF ARTS, BOMBAY. The institute offers the following diploma courses :—

- (a) 7-year course in Drawing and Painting,
- (b) 4-year course in Commercial Art, and
- (c) 5-year course in Modelling.

Admission qualification Matriculation for (b) and Intermediate drawing grade for (a) and (c). The annual intake is 30, 125 and 6 respectively.

The institute also provides a drawing teacher's certificate course of one year's duration. Admission qualification—Intermediate drawing grade. Number of admissions—40 per year.

(2) KALABHAVAN TECHNICAL INSTITUTE, BARODA. The institute offers a diploma course of 4 year's duration. The admission qualification is Matriculation and the annual intake is 5.

COMMERCE

Northern Region.—(1) DEPARTMENT OF COMMERCE, BANARAS HINDU UNIVERSITY, BANARAS. The institution offers (a) a diploma course of 2 years' duration, (b) a degree course of the same duration, (c) a post-graduate degree course of one year's duration, and (d) a research degree course of 2 years' duration. The admission qualification is Matriculation for (a), I. Com. for (b), B. Com. for (c) and M. Com. for (d). The annual intake is 134, 103 and 20 for (a), (b) and (c) respectively.

(2) BIKRAM COLLEGE OF COMMERCE, FARIDKOT (EAST PUNJAB). The college offers a degree course of two years' duration. The admission qualification is I. Com. and the annual intake is 4.

(3) SETH G. B. PODDER COLLEGE, NAWALGARH, JAIPUR. The college offers a degree course of 2 years' duration. Admission qualification is I. Com.

(4) SHYAM SUNDER MEMORIAL COLLEGE, CHANDAUSI, UNITED PROVINCES. The institution offers (a) a diploma course, and (b) a degree course of 2 years' duration each. The admission qualification is H. S. E. passed for (a) and I. Com. for (b). The annual intake is 55 and 22 respectively.

(5) DELHI POLYTECHNIC, DELHI. The institution offers (a) an All-India Diploma course of 3 years' duration, and (b) a part-time All-India certificate course of the same duration. The admission qualification is Pre-Commerce or Higher Secondary Certificate for (a) and Matriculation for (b). The annual intake is 12 and 15 respectively.

Southern Region.—(1) CENTRAL SCHOOL OF COMMERCE, HYDERABAD (DECCAN). The school offers a diploma course of 2 years' duration. The admission qualification is S. S. L. C. and the annual intake is 28.

(2) SANATAN DHARMA COLLEGE, ALLEPPEY, TRAVANCORE. The college offers a diploma course in commerce of 4 years' duration. The admission qualification is S. S. L. C. and the annual intake is 101.

(3) CENTRAL COLLEGE, BANGALORE. The college offers a degree course of 4 years' duration. The admission qualification is S. S. L. C. and the annual intake is 143.

Eastern Region.—(1) RAJENDRA COLLEGE, CHAFRA, BIHAR. The college offers (a) a diploma course of 2 years' duration and (b) a degree course of the same duration. The admission qualification is Matriculation for (a) and I. Com. for (b). The annual intake is 150 and 67 respectively.

(2) HARPRASAD DAS JAIN COLLEGE, ARRAH, BIHAR. The college offers a degree course of 4 years' duration. The admission qualification is Matriculation and the annual intake is 32.

(3) SAMBALPUR COLLEGE, SAMBALPUR, ORISSA. The college offers (a), a diploma course and (b) a degree course—both of 2 years' duration. The admission qualification is Matriculation for (a) and I. Com. for (b) and the annual intake is 202 and 75 respectively.

(4) GOVERNMENT COMMERCIAL INSTITUTE, CALCUTTA. The institute offers a diploma course of 2 years' duration. The admission qualification is Matriculation and the annual intake is 97.

Western Region—(1) BRIHAN MAHARASTRA COLLEGE OF COMMERCE, POONA. The college offers (a) a degree course of 4 years' duration and (b) a post-graduate degree course of 2 years' duration. The admission qualification is Matriculation for (a) and B. Com. for (b). The annual intake for the degree course is 170.

(2) HARGOVAN DAS LUXMICHAND COLLEGE OF COMMERCE, AHMEDABAD. The college offers (a) a degree course of 4 years' duration and (b) a post-graduate degree course of 2 years' duration. The admission qualification is Matriculation for (a) and B. Com. for (b). The combined annual intake is 275.

(3) PRATAP SINGH COLLEGE OF COMMERCE, BARODA. The college offers (a) a degree course of 2 years' duration and (b) a post-graduate degree course of the same duration. The admission qualification is I. Com. for (a) and B. Com. for (b).

(4) RAMANI RANJAN ANNANDI LAL PODDAR COLLEGE OF COMMERCE, BOMBAY. The college offers (a) a degree course of 2 years' duration and (b) a post-graduate degree course of the same duration. The admission qualification is I. Com. for (a) and B. Com. for (b).

(5) GOVINDRAM SEKSARIA COLLEGE OF COMMERCE, NAGPUR.

(6) GOVINDRAM SEKSARIA COLLEGE OF COMMERCE, WARDHA. The two institutions mentioned above offer a degree course of 2 years' duration. The admission qualification is I. Com. and the annual intake is 145 and 103 respectively.

The foregoing is an outline of the training facilities at present available in India in the different branches of Engineering, Technology, Art, Architecture and Commerce. Detailed information regarding the facilities available in each region and particulars of individual institutions are given in the subsequent chapters.

It may be noted, that the duration of course includes, in certain cases a period of practical training varying from three months to one year where such training forms an integral part of the course.

Classified list of Technical Institutions referred to in this report

I ENGINEERING AND TECHNOLOGY GROUP 'A' INSTITUTIONS

Reference No.	Name and address
	<i>Northern Region—</i>
N-1	College of Technology, Banaras Hindu University, Banaras
N-2	Department of Geology, Banaras Hindu University, Banaras.
N-3	Harcourt Butler Technological Institute, Kanpur, U. P.
N-4	Indian Institute of Sugar Technology, Kanpur.
	<i>Southern Region—</i>
S-1	Erskine College of Natural Science, University of Andhra, Waltair.
S-2	Indian Institute of Science, P. O. Malleswaram, Bangalore.
S-3	Jeypore Vikram Deo College of Science, and Technology, University of Andhra, Waltair.
	<i>Eastern Region—</i>
E 1	University College of Science and Technology, Departments of Applied Physics and Applied Chemistry, Calcutta University, Calcutta.
	<i>Western Region—</i>
W-1	Department of Chemical Technology, University of Bombay, Matunga, Bombay.
W-2	Luxminarayan Institute of Technology, Nagpur University, Nagpur, C. P.

GROUP 'B' INSTITUTIONS

	<i>Northern Region—</i>
N-5	College of Engineering and Technology, Aligarh Muslim University Aligarh, U. P.
N-6	College of Mining and Metallurgy, Banaras Hindu University, Banaras,
N-7	Delhi Polytechnic, Delhi.
N-8	Engineering College, Banaras Hindu University, Banaras.
N-9	Thomason Engineering College, Roorkee, U. P.
	<i>Southern Region—</i>
S-4	Alagappa Chettiar College of Technology, University of Madras, Saidapet, Guindy, Madras.
S-5	Arthur Hope College of Technology, Coimbatore, Madras.
S-6	College of Engineering, Guindy, Madras.
S-7	College of Engineering, University of Travancore, Trivandrum, Travancore State.
S-8	College of Engineering (Vizag.), Coconada, Madras.
S-9	College of Engineering, Bangalore, Mysore.
S-10	Department of Engineering and Technology, Annamalai University Annamalainagar, Madras.

- S-11 Engineering College, Anantpur, Madras.
- S-12 Osmania Engineering College, P. O. Lallaguda, Hyderabad (Deccan).
- S-13 Sri Krishnarajendra Silver Jubilee Technological Institute, Bangalore, Mysore.

Eastern Region—

- E-2 Bengal Engineering College, P. O. Botanic Garden, Howrah, West-Bengal.
- E-3 Bihar College of Engineering, Patna, Bihar.
- E-4 College of Engineering and Technology, Jadavpur, Calcutta.
- E-5 Indian School of Mines, Dhanbad, Bihar.

Western Region—

- W-3 College of Engineering, Poona, Bombay.
- W-4 Victoria Jubilee Technical Institute, Matunga, Bombay.

GROUP ' C ' INSTITUTIONS

Northern Region—

- N-10 Government Central Textile Institute, Kanpur, U. P.
- N-11 Government Central Weaving Institute, Banaras, U. P.
- N-12 Government Technical Institute, Gorakhpur, U. P.
- N-13 Government Technical Institute, Jhansi, U. P.
- N-14 Government Technical Institute, Lucknow, U. P.
- N-15 Government Metal Works Institute, Ambala City, East Punjab.
- N-16 Punjab Institute of Textile Technology, Amritsar, East Punjab.
- N-17 Technical College, Dayalbagh, Agra, U. P.
- N-18 Civil Engineering School, La-Touche Road, Lucknow, U. P.

Southern Region—

- S-14 Government School of Technology, Pophams, Broadway, Madras.
- S-15 Government Textile Institute, Washermanpet, Madras.
- S-16 Institute of Textile Technology, University of Travancore, Trivandrum.
- S-17 Institute of Leather Technology, Washermanpet, Madras.
- S-18 Osmania Technical College, Hyderabad (Deccan).
- S-19 Sri Jayachamarajendra Occupational Institute, Bangalore, Mysore.
- S-20 A. G. Polytechnic, Vuyyur, Madras.
- S-21 Andhra Polytechnic, Coconada, Madras.
- S-22 Central Polytechnic, Madras.
- S-23 Dravida Polytechnic, Madura, Madras.
- S-24 Kerala Polytechnic, Calicut, Madras.
- S-25 Karnataka Polytechnic, Mangalore, Madras.

Eastern Region—

- E-6 Bengal Textile Institute, Serampore, Hoogly, West Bengal.
- E-7 Bengal Silk Technological Institute, Berhampore, West Bengal.
- E-8 Calcutta Technical School, Sir Surendranath Banerjee Road, Calcutta

- E-9 Calcutta Engineering College, 13, Jamir Lane, Ballygunge Calcutta.
 E-10 Kanchrapara Technical School, Kanchrapara, West Bengal.
 E-11 Orissa School of Engineering, Cuttack, Orissa.

Western Region—

- W-5 Kalabhavan Technical Institute, Baroda.
 W-6 Government Engineering School, Sadar Bazar, Nagpur, C. P.
 W-7 Government Tanning Institute, Bandra, Bombay, 20.
 W-8 Government Leather Working Institute, Bandra, Bombay 20.
 W-9 Sir Cusrow Wadia Institute of Electrical Technology, 19, Bund Garden Road, Poona, Bombay .

GROUP ' D ' INSTITUTIONS

Northern Region—

- N-19 Rampur Government Polytechnic, Rampur State, U. P.
 N-20 Technical College, Jodhpur, Rajputana.
 N-21 Engineering College, Civil Lines, Ludhiana, East Punjab.

Western Region—

- *W-10 Government School of Industry, Satara City, Bombay.
 W-11 O'Brien Technical Institute, Sholapur, Bombay.
 W-12 Morvi Technical Institute, Morvi, Kathiawar.
 *W-13 F. S. Parekh Technical Institute, Chowkbazar, Surat, Bombay.
 **W-14 R. C. Technical Institute, Railwaypura, Ahmedabad.
 *W-15 School of Industry, Ratnagiri, Bombay.

II. ART AND ARCHITECTURE

GROUP ' B ' INSTITUTIONS

Northern Region—

- N-7 Delhi Polytechnic, Delhi.

Eastern Region—

- E-12 Government School of Arts, Chowringhee Road, Calcutta.

Western Region—

- W-16 Sir J. J. School of Arts, Hornby Road, Fort, Bombay.

*Does not satisfy all the requirements of Group 'D' institutions as defined in this report.
 **Lately raised to 'C' group as it has started new diploma courses in Civil Engineering, Cotton Textile, Dyeing, Bleaching and Printing and a combined course in Mechanical and Electrical Engineering. Annual intakes are 50, 30, 15 and 50 respectively. Admission qualification is Matriculation for all courses. The duration is 3 years for Civil Engineering courses and for other courses, duration is 4 years.

GROUP ' C ' INSTITUTIONS

Northern Region—

- N-22 Government School of Arts and Crafts, Lucknow, U. P.

Southern Region—

- S-26 Central School of Arts and Crafts, Hyderguda, Hyderabad (Deccan).
S-27 H. H. The Maharaja's School of Arts, Trivandrum, Travancore.

Western Region—

- W-5 Kalabhavan Technical Institute, Baroda.

GROUP ' D ' INSTITUTIONS

Northern Region—

- N-14 Government Technical Institute, Lucknow, U. P.

Southern Region—

- S-28 School of Arts and Crafts, Poonamali High Road, Park Town, Madras.

III. COMMERCE

GROUP ' A ' INSTITUTIONS

Northern Region—

- N-23 Department of Commerce, Banaras Hindu University, Banaras.

Western Region—

- W-17 Brihan Maharashtra College of Commerce, Poona, Bombay.
W-18 Hargovan Das Luxmichand College of Commerce, Ahmedabad, Bombay.
W-19 Pratap Singh College of Commerce, Baroda.
W-20 Ramani Ranjan Anandilal Poder College of Commerce, Matunga, Bombay.

GROUP ' B ' INSTITUTIONS

Northern Region—

- N-24 Bikram College of Commerce, Faridkot, Punjab.
N-7 Delhi Polytechnic, Delhi.
N-25 Seth G. B. Podder College, Nawalgarh, Jaipur, Rajputana.
N-26 Shyamsundar Memorial College, Chandausi, U. P.

Southern Region—

- S-29 Central College, Bangalore, Mysore.

Eastern Region—

- E-13 Harprasad Das Jain College, Arrah, Bihar.
E-14 Rajendra College, Chapra, Saran, Bihar.
E-15 Sambalpur College, Sambalpur, Orissa.

Western Region—

- W-21 Govind Ram Seksaria College of Commerce, Nagpur, C. P.
W-22 Govind Ram Seksaria College of Commerce, Wardha, C. P.

GROUP 'C' INSTITUTIONS

Southern Region—

- S-30 Central School of Commerce, Saifabad, Hyderabad (Deccan).
 S-31 Sanatan Dharma College, Alleppey, Travancore.

Eastern Region—

- E-16 Government Commercial Institute, 5, Clive Street, Calcutta.

CHAPTER II

REGIONAL FACILITIES

NORTHERN REGION

Twenty-six institutions of this region (*vide* list at the end of Chapter I) have furnished the requisite informations in reply to the questionnaire issued to them. (Appendix 'A'). All institutions in this region are either residential or partly so, excepting the Technical College, Jodhpur, Rajputana. Total number of residential institutions whose names are given below is fifteen :—

1. College of Engineering, Banaras Hindu University, Banaras. (N-8).
2. College of Technology, Banaras Hindu University, Banaras (N-1).
3. College of Mining and Metallurgy Banaras Hindu University, Banaras (N-6).
4. Department of Geology, Banaras Hindu University, Banaras (N-2).
5. College of Engineering and Technology, Muslim University, Aligarh, U. P. (N-5).
6. Thomason Engineering College, Roorkee, U. P. (N-9).
7. Engineering College, Civil Lines, Ludhiana, Punjab (N-21).
8. Harcourt Butler Technological Institute, Kanpur (N-3).
9. Indian Institute of Sugar Technology, Kanpur, (N-4).
10. Government Technical Institute, Gorakhpur, U. P. (N-12).
11. Government Technical Institute, Jhansi, U. P. (N-13).
12. Government Technical Institute, Lucknow, U. P. (N-14).
13. Department of Commerce, Banaras Hindu University, Banaras (N-23).
14. Bikram College of Commerce, Faridkot, Punjab (N-24).
15. Seth G. B. Podder College, Nawalgarh, Jaipur, Rajputana (N-25).

Number of partly residential institutions is ten , as given below :—

1. Delhi Polytechnic, Delhi (N-7).
2. Government Central Textile Institute, Kanpur (N-10).
3. Government Central Weaving Institute, Banaras (N-11).
4. Government Metal Works Institute, Ambala City (N-15).
5. Punjab Institute of Textile Technology, Amritsar, East Punjab (N-16).
6. Technical College, Dayalbagh, (N-17).
7. Civil Engineering School, Lucknow (N-18).
8. Rampur Government Polytechnic, Rampur, U. P. (N-19).
9. Shyam Sunder Memorial College, Chandausi, U. P. (N-26).
10. Government School of Arts and Crafts, Lucknow, U. P. (N-22).

All these twenty-six institutions together offer facilities for training in as many as sixteen different branches of studies (as shown in Table I V of

Chapter I) covering Engineering, Technology, Art, Architecture and Commerce. The details are as follows :—

I. AUTOMOBILE ENGINEERING

Two institutions of this region offering facilities for study in Automobile Engineering are :

A.—Government Metal Works' Institute, Ambala City, East Punjab

1. Course of study with duration	A 4-year Certificate course.
2. Minimum Admission qualification	Matriculation or its equivalent.
3. Annual Tuition fee	Rs. 9.
4. Annual Intake	25 (including students of Electrical and Mechanical Engineering).
5. Annual Output	14 (including students of Electrical and Mechanical Engineering).
6. Distinction awarded with recognition	The Certificate awarded is recognised by Punjab Government.
Remarks	Government sponsored institution (East Punjab).

B.—Technical College, Dayalbagh, Agra

1. Course of study with duration	A 2-year Certificate course.
2. Minimum Admission qualification	Matriculation or its equivalent.
3. Annual Tuition fee	Rs. 96 to 120.
4. Annual Intake	25.
5. Annual Output	11.
6. Distinction awarded with recognition	The Certificate issued by the College is countersigned by the Director of Industries, U.P.
Remarks	This is a private institution aided by U. P. Government.

II. CIVIL ENGINEERING

Four institutions offering facilities for study in Civil Engineering are as follows :—

A.—College of Engineering and Technology, Muslim University, Aligarh ✓

Degree Course

1. Course of study with duration	A 4-year course (including one year of practical training).
2. Minimum Admission qualification	I. Sc.
3. Annual Tuition fee	Rs. 300.
4. Annual Intake	96.
5. Annual Output	64.
6. Distinction awarded with recognition	B.Sc. in Civil Engineering is awarded by Muslim University, Aligarh.

Diploma Course

1. Course of study with duration	A 4-year Diploma course (including one year of practical training).
2. Minimum Admission qualification	Matriculation or its equivalent.
3. Annual Tuition fee	Rs. 120.
4. Annual Intake	54.
5. Annual Output	10.
6. Distinction awarded with recognition	L. E. C. is awarded by Muslim University, Aligarh.
Remarks	Non-Muslim students not exceeding 10% are generally admitted.

B.—Thomason College of Engineering, Roorkee, U. P.

Diploma Course

1. Course of study with duration	A 4-year diploma course (including one year of practical training).
2. Minimum Admission qualification	I.Sc. or Pre-Engineering.
3. Annual Tuition fee	Rs. 216.
4. Annual Intake	30
5. Annual Output	43.
6. Distinction awarded with recognition	The Diploma awarded is recognised in India as equivalent to a degree in Civil Engineering of any Indian University.
Remarks	This institution is controlled by U. P. Government and is provided with Soil Engineering laboratory.

Certificate Course

1. Course of study with duration	A 3-year Certificate course (overseer's course) (including one year of practical training).
2. Minimum Admission qualification	High School Leaving Certificate.
3. Annual Tuition fee	Rs. 54.
4. Annual Intake	84.
5. Annual Output	72.
6. Distinction awarded with recognition	The Certificate is recognised by U. P. Government for subordinate service of engineering.

C.—Civil Engineering School, La-Touche Road, Lucknow

1. Course of study with duration	A 2-year Diploma course.
2. Minimum Admission qualification	High School Leaving Certificate.
3. Annual Tuition fee	Rs. 300.
4. Annual Intake	90.
5. Annual Output	26.
6. Distinction awarded with recognition	The Diploma awarded is recognised by U. P. Government for overseer's job.
Remarks	A private institution.

D.—Engineering College, Civil Lines, Ludhiana

Associate Course

1. Course of study with duration	A 3-year Associateship course in basic engineering.
2. Minimum Admission qualification	M. S. L. C.
3. Annual Tuition fee	Rs. 120.
4. Annual Intake	} Details not available.
5. Annual Output	
6. Distinction awarded with recognition	

Diploma Course

1. Course of study with duration	A 2-year Diploma course in basic engineering.
2. Minimum Admission qualification	M. S. L. C.
3. Annual Tuition fee	Rs. 120.
4. Annual Intake	} Details not available.
5. Annual Output	
6. Distinction awarded with recognition	
Remarks	This is a private institution.

III.—ELECTRICAL ENGINEERING

Three institutions of this region offering training in electrical engineering are as follows :—

A.—College of Engineering and Technology, Muslim University, Aligarh, U. P.

Degree Course

- | | | |
|---|-------|--|
| 1. Course of study with duration | . . . | A 4-year course (inclusive of one year of practical training). |
| 2. Minimum Admission qualification | . . . | I. Sc. |
| 3. Annual Tuition fee | . . . | Rs. 300. |
| 4. Annual Intake | . . . | 50. |
| 5. Annual Output | . . . | 38. |
| 6. Distinction awarded with recognition | . . . | B. Sc. degree is awarded by the Muslim University. |

Diploma Course

- | | | |
|---|-------|--|
| 1. Course of study with duration | . . . | A 4-year Diploma course, (inclusive of one year's practical training). |
| 2. Minimum Admission qualification | . . . | Matric. |
| 3. Annual Tuition fee | . . . | Rs. 120. |
| 4. Annual Intake | . . . | 13. |
| 5. Annual Output | . . . | 6. |
| 6. Distinction awarded with recognition | . . . | A Diploma L. E. E. is awarded by the Muslim University. |
| Remarks | . . . | Non-muslim students not more than 10% are admitted. |

B.—Delhi Polytechnic, Delhi

Diploma Course

- | | | |
|---|-------|--|
| 1. Course of study with duration | . . . | A 4-year All-India Diploma course in Electrical Engineering (inclusive of one years practical training). |
| 2. Minimum Admission qualification | . . . | I. Sc. or Pre-Engineering. |
| 3. Annual Tuition fee | . . . | Rs. 60. |
| 4. Annual Intake | . . . | 40. |
| 5. Annual Output | . . . | 27. |
| 6. Distinction awarded with recognition | . . . | All India Diplomas are recognised by F. P. S. C. and Government Departments as equivalent to University degrees. |

Certificate Course

- | | | |
|---|-------|---|
| 1. Course of study with duration | . . . | A 3-year All-India Certificate course. (Part-time evening course.) |
| 2. Minimum Admission qualification | . . . | Matric or equivalent. |
| 3. Annual Tuition fee | . . . | Rs. 36. |
| 4. Annual Intake | . . . | 33. |
| 5. Annual Output | . . . | 6. |
| 6. Distinction awarded with recognition | . . . | All-India Certificate is awarded by All India Council for Technical Education. |
| Remarks | . . . | This is a unique institution in India. The institution is directly under the control of Ministry of Education, Government of India. |

C.—Thomason College of Engineering, Roorkee

- | | | |
|------------------------------------|-------|---|
| 1. Course of study with duration | . . . | A 3-year diploma course. |
| 2. Minimum Admission qualification | . . . | Pre-Engineering or I. Sc. |
| 3. Annual Tuition fee | . . . | Rs. 216. |
| 4. Annual Intake | . . . | 32 (inclusive of students of Mechanical Engineering). |
| 5. Annual Output | . . . | This section is newly started. |

6. Distinction awarded with recognition . The diploma of this institution is recognised to be equivalent to a degree of any Indian University.
- Remarks This is an institution run by U.P. Government.

IV. ELECTRICAL AND MECHANICAL ENGINEERING (COMBINED)

Six institutions offering combined courses in Electrical and Mechanical Engineering are as follows :—

A—Engineering College, Banaras Hindu University, Banaras.

1. Course of study with duration . . . A 5-year degree course in combined electrical and mechanical engineering (inclusive of one year's practical training).
 2. Minimum Admission qualification . . I. Sc. (with Physics, Chemistry and Mathematics).
 3. Annual Tuition fee Rs. 230 for 1st and 2nd years.
Rs. 250 for 3rd and 4th years.
 4. Annual Intake 140.
 5. Annual Output 78.
 6. Distinction awarded with recognition . B. Sc. in Engineering awarded by Banaras Hindu University.
- Remarks Facilities exist for research work in Electrical communication. There is a fixed quota for admission on provincial and states basis.

B.—Government Technical Institute, Gorakhpur, U. P.

1. Course of study with duration . . . A 3-year Diploma course in Electrical and Mechanical Engineering followed by 2 years' practical training.
 2. Minimum Admission qualification . . High School standard, preferably H. S. E. passed with science.
 3. Annual Tuition fee Rs. 12 for U. P. students and
Rs. 360 for non-U.P. students.
 4. Annual Intake 30.
 5. Annual Output 28.
 6. Distinction awarded with recognition . A diploma is awarded to successful candidates by the Government of U. P.
- Remarks The institution is controlled by U. P. Government and generally the course is meant for *bona fide* U. P. residents.

C.—Government Technical Institute, Lucknow, United Provinces

1. Course of study with duration . . . A 3-year diploma course followed by two years' practical training in recognised workshops.
 2. Minimum Admission qualification . . H. S. E. Passed, Matric or equivalent.
 3. Annual Tuition fee Rs. 12 for U. P. students.
Rs. 360 for non-U. P. students.
 4. Annual Intake 34.
 5. Annual Output 24.
 6. Distinction awarded with recognition . A diploma is awarded by the Government of United Provinces.
- Remarks United Provinces Government controlled institution.

D.—Government Technical Institute, Jhansi

- | | |
|---|---|
| 1. Course of study with duration | A diploma course of 5 years' duration. |
| 2. Minimum Admission qualification | Matric or equivalent. |
| 3. Annual Tuition fee | Nil. |
| 4. Annual Intake | 20/28. |
| 5. Annual Output | 18. |
| 6. Distinction awarded with recognition | The diploma is awarded by the Director of Industries and Commerce, United Provinces Government. |
| Remarks | Practical training is provided in G. I. P. Railway workshops at Matunga, Parel and Jhansi. The course is really meant for G. I. P. Railway apprentices only. Age of the candidate must be between 16 to 19 years. |

E.—Technical College, Dayalbagh, Agra

- | | |
|---|---|
| 1. Course of study with duration | A 4-year diploma course. |
| 2. Minimum Admission qualification | Matriculation or equivalent. |
| 3. Annual Tuition fee | Rs. 60. |
| 4. Annual Intake | 25. |
| 5. Annual Output | 23. |
| 6. Distinction awarded with recognition | Diploma awarded by the College is countersigned by the Director of Industry and Commerce, U. P. Government. The Diploma is recognised by United Provinces Government. |
| Remarks | This is a private institution. |

F.—Technical College, Jodhpur, Rajputana

- | | |
|---|---|
| 1. Course of study with duration | A 5-year Certificate course run on sandwich system. |
| 2. Minimum Admission qualification | Matriculation or equivalent. |
| 3. Annual Tuition fee | } Information not available. |
| 4. Annual Intake | |
| 5. Annual Output | |
| 6. Distinction awarded with recognition | |
| Remarks | This is a state-controlled institution. Apprenticeship training is given in the State-owned factories or in other establishments. |

V. MECHANICAL ENGINEERING

Five institutions offering Mechanical Engineering course in this region are as follows:—

A.—College of Engineering and Technology, Muslim University, Aligarh, U.P.

Degree Course

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|---|--|
| 1. Course of study with duration | A 4-year degree course (including one year's practical training). |
| 2. Minimum Admission qualification | I. Sc. |
| 3. Annual Tuition fee | Rs. 300. |
| 4. Annual Intake | 22. |
| 5. Annual Output | 17. |
| 6. Distinction awarded with recognition | B. Sc. degree in Mechanical Engineering is awarded by the Muslim University, Aligarh |

Diploma Course

1. Course of study with duration	. A 4-year diploma course (including one year's practical training).
2. Minimum Admission qualification	. Matriculation.
3. Annual Tuition fee	. Rs. 120.
4. Annual Intake	. 12.
5. Annual Output	. 5.
6. Distinction awarded with recognition	. L. M. E. diploma is awarded by the Muslim University.
Remarks	. Non-Muslim students not exceeding 10% are generally admitted.

B.—Thomason College of Engineering, Roorkee, U. P.

1. Course of study with duration	. A 3-year diploma course.
2. Minimum Admission qualification	. Pre-engineering or I. Sc.
3. Annual Tuition fee	. Rs. 216.
4. Annual Intake	. 32 (including Electrical Engineering students). Newly started.
5. Annual Output	. 32 (including Electrical Engineering students). Newly started.
6. Distinction awarded with recognition	. The diploma awarded by the institution is recognised as equivalent to the degree awarded by any University in India.
Remarks	. This institution is controlled by United Provinces Government.

C.—Government Technical Institute, Lucknow, U. P.

1. Course of study with duration	. A 3-year Certificate course in Light Machine Mechanics.
2. Minimum Admission qualification	. Student of VIIIth standard of High School
3. Annual Tuition fee	. Nil for U. P. students and Rs. 360 for non-U. P. students.
4. Annual Intake	. 9.
5. Annual Output	. 3.
6. Distinction awarded with recognition	. A certificate is awarded to successful candidates.
Remarks	. This is controlled by United Provinces Government.

D.—Government Metal Works Institute, Ambala City, East Punjab

1. Course of study with duration	. A 4-year diploma course.
2. Minimum Admission qualification	. Matriculation.
3. Annual Tuition fee	. Rs. 9.
4. Annual Intake	. 25.
5. Annual Output	. 14.
6. Distinction awarded with recognition	. A certificate is awarded to a successful candidate.
Remarks	. This institute is controlled by East Punjab Government.

E.—Rampur Polytechnic, Khasbagh, Rampur State

1. Course of study with duration	. A 3-year certificate course.
2. Minimum Admission qualification	. VIII standard of High School.
3. Annual Tuition fee	. Nil.
4. Annual Intake	. 21.
5. Annual Output	. 10.
6. Distinction awarded with recognition	. A certificate of competency is awarded to a successful candidate.
Remarks	. This is a Government Institute of Rampur State.

VI. RADIO ENGINEERING

Only institution offering a course in Radio Engineering is **Rampur Polytechnic, Rampur, U. P.** Details are not available for this report.

VII. METALLURGY

Only institution in this region offering courses in Metallurgy is the **College of Mining and Metallurgy, Banaras Hindu University, Banaras.**

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|---|--|
| 1. Course of study with duration | A 4-year degree course (inclusive of 6 months of practical training). |
| 2. Minimum Admission qualification | I. Sc. |
| 3. Annual Tuition fee | Rs. 260. |
| 4. Annual Intake | 26. |
| 5. Annual Output | 20. |
| 6. Distinction awarded with recognition | B. Sc. in Metallurgy is awarded to a successful candidate by Banaras Hindu University. |
| Remarks | The institution is controlled by Banaras Hindu University and offers facilities for research works. A research degree (Ph. D.) in Metallurgy is also awarded to successful candidates—3 years after graduation from the College. |

VIII. MINING

The only institution offering courses in Mining is the **College of Mining and Metallurgy, Banaras Hindu University, Banaras.** Details of the courses are as follows :—

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|---|---|
| 1. Course of study with duration | A 4-year degree course (inclusive of 6 months of practical training). |
| 2. Minimum Admission qualification | Intermediate Science. |
| 3. Annual Tuition fee | Rs. 216. |
| 4. Annual Intake | 16. |
| 5. Annual Output | 5/10. |
| 6. Distinction awarded with recognition | B. Sc. degree in Mining is awarded by Banaras Hindu University to successful candidates. |
| Remarks | The institution also provides facilities for researches in Mining and offers a three years' research degree course (Ph. D) Admissions are fixed for different provinces and states according to a quota allotted. |

IX. GEOLOGY

The only institution in Northern region offering courses in Geology is the **Department of Geology, Banaras Hindu University, Banaras.** Details of the courses are as follows :—

Degree Course

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|--|---|
| 1. Course of study with duration | A 2-year degree course. |
| 2. Minimum Admission qualification | Intermediate Science. |
| 3 Annual Tuition fee | Information has not been available for this report. |
| 4 Annual Intake | 80. |
| 5 Annual Output | 33. |
| 6 Distinction awarded with recognition | B. Sc. degree in Geology is awarded by Banaras Hindu University to the successful candidates. |

Post-Graduate Degree Course

1. Course of study with duration	A 2-year post-graduate degree course.
2. Minimum Admission qualification	B. Sc. (Geology).
3. Annual Tuition fee	Information not available.
4. Annual Intake	15.
5. Annual Output	12.
6. Distinction awarded with recognition	M. Sc. degree in Geology is awarded by Banaras Hindu University to the successful candidates.
Remarks	There are facilities for research in Geology for 1 post-M.Sc. students. Research degrees such as Ph. D. and D. Sc. are awarded to successful candidates.

X. CHEMICAL TECHNOLOGY

Four institutions offering courses in Chemical Technology and allied subjects are as follows :—

A.—College of Technology, Banaras Hindu University, Banaras.*Degree Course*

1. Course of study with duration	Degree courses of 3-years duration are offered in :— (i) Industrial Chemistry (Soaps, oils, and fine chemicals, etc.). (ii) Glass Technology. (iii) Ceramics. (iv) Pharmaceuticals.
2. Minimum Admission qualification	Intermediate Science.
3. Annual Tuition fee	Rs. 180
4. Annual Intake	(i) 15 in Glass Technology. (ii) 22 in Pharmaceuticals. (iii) 16 in Ceramics. (iv) Annual intake in Industrial Chemistry is not available for this report.
5. Annual Output	14 in Glass Technology. 20 in Pharmaceuticals. 12 in Ceramics.
6. Distinction awarded with recognition	Following distinctions are awarded by Banaras Hindu University to the successful candidates who complete their courses in different branches of study : B. Sc. (Ind. Chem.), B. Pharm. and B. Sc. (Tech.) in Industrial Chemistry, Pharmaceuticals and Glass Technology and Ceramics respectively.

*Post-Graduate Courses**I.—Pharmaceutics*

1. Course of study with duration	A 1-year post-graduate degree course in Pharmaceutics.
2. Minimum Admission qualification	B. Pharm.
3. Annual Tuition fee	Rs. 110.
4. Annual Intake	22.
5. Annual Output	4.
6. Distinction awarded with recognition	M. Pharms. is awarded by the Banaras Hindu University to all successful candidates who complete their post-graduate courses in Pharmaceutics.

II.—Industrial Chemistry

1. Course of study with duration	A 2-year post-graduate degree course.
2. Minimum Admission qualification	B. Sc. (Industrial Chemistry).
3. Annual Tuition fee	Rs. 110.
4. Annual Intake	Not available for this report.
5. Annual Output	Not available for this report.
6. Distinction awarded with recognition	M. Sc. (Industrial Chemistry) is awarded by Banaras Hindu University, Banaras, to all successful candidates.
Remarks	M. Sc. (Tech.) in Glass Technology is awarded to successful candidates who carry on research in Glass Technology after obtaining their B. Sc. (Tech.) degree from the College. There are facilities for researches in other branches of studies, for post-graduate students in respective subjects. D. Sc. degrees are awarded to candidates who complete their research works successfully.

Diploma Course

1. Course of study with duration	A 2-year Diploma course in Pharmaceutics.
2. Minimum Admission qualification	High School Leaving Certificate.
3. Annual Tuition fee	Rs. 80.
4. Annual Intake	Intake is temporarily suspended.
5. Annual Output	Nil.
6. Distinction awarded with recognition	L. Pharm. is awarded to students who successfully complete their diploma course in Pharmaceutics.
Remarks	This course is temporarily suspended.

B.—Harcourt Butler Technological Institute, Kanpur, U. P.

Associateship Course

1. Course of study with duration	A 2-year Associateship course in General Chemical Research and Oil Chemistry and Chemical Technology.
2. Minimum Admission qualification	B. Sc.
3. Annual Tuition fee	Nil for U. P. students and Rs. 600 for non-U. P. students.
4. Annual Intake	6 for General Chemistry, 31 for Oil Chemistry and Technology.
5. Annual Output	3 for General Chemistry 17 for Oil Chemistry and Technology.
6. Distinction awarded with recognition	On passing the Associateship courses the students are awarded Associateship diploma and they are entitled to use A. H. B. T. I.

Fellowship Course

1. Course of study with duration	A 2-year Fellowship course in Oil Chemistry and Chemical Technology.
2. Minimum Admission qualification	B. Sc.
3. Annual Tuition fee	Nil for U. P. students and Rs. 600 for non U. P. students.
4. Annual Intake	2.
5. Annual Output	1.
6. Distinction awarded with recognition	On passing the Fellowship course the students are awarded Fellowship diplomas and they are entitled to use F. H. B. T. I.

II

1. Course of study with duration	A 4-year Fellowship Course in General Chemistry.
2. Minimum Admission qualification	B. Sc.
3. Annual Tuition fee	Nil for U. P. students and Rs. 600 for non-U. P. students.
4. Annual Intake	1.
5. Annual Output	Nil.
6. Distinction awarded with recognition	On passing the Fellowship course the students are awarded Fellowship diplomas and they are entitled to use F. H. B. T. I.
Remarks	Courses in General Chemistry are of research nature. This institution is controlled by U. P. Government and meant for training of Technologists required for U. P.

Short Courses

1. Course of study with duration	8/10 months' courses in Oil milling, Soap making, Paints, etc.
2. Minimum Admission qualification	B. Sc.
3. Annual Tuition fee	Nil for U. P. students and Rs. 600 for non-U. P. students.
4. Annual Intake	19.
5. Annual Output	10.
6. Distinction awarded with recognition	Certificates are awarded to students who complete short-term courses.

C.—Government Central Textile Institute, Kanpur, U. P.*Diploma Course*

1. Course of study with duration	A 4-year diploma course in Textile Chemistry inclusive of one year's practical training.
2. Minimum Admission qualification	High School Examination Certificate.
3. Annual Tuition fee	Nil for U. P. students and Rs. 360 for non-U. P. students.
4. Annual Intake	47 (including students of Textile Technology).
5. Annual Output	16 including students of Textile Technology.
6. Distinction awarded with recognition	The diploma is awarded to successful candidates. The students are entitled to use D. C. T.

Certificate Course

1. Course of study with duration	A 2-year Certificate course in Textile Chemistry.
2. Minimum Admission qualification	Upto High School Examination standard.
3. Annual Tuition fee	Nil for U. P. students. and Rs. 360 for non-U. P. students.
4. Annual Intake	7 (including students of Textile Technology).
5. Annual Output	2 (including students of Textile Technology).
6. Distinction awarded with recognition A Remarks.	Certificate is awarded to Successful Candidates. This is an institution controlled by P. U. Government and generally meant for United Provinces students.

D.--Delhi Polytechnic, Delhi.

1. Course of study with duration	All-India Diploma course in Chemical Technology of 5 years duration (inclusive of 1 year's practical training.)
2. Minimum Admission qualification	Pre-Engineering or I. Sc.
3. Annual Tuition fee	Rs. 60.
4. Annual Intake	16.
5. Annual Output	3.
6. Distinction awarded with recognition.	Diploma is recognised by the Central Government Departments as equivalent to degree of a Indian University.
Remarks	This is a unique institution under the Ministry of Education, Government of India.

XI. LEATHER TECHNOLOGY

The only institution offering a course in leather technology is **Technical College, Dayalbagh Agra**. Details of the course are as follows:

1. Course of study with duration	A 2-year course in Leather working.
2. Minimum Admission qualification	VIIIth standard of High School.
3. Annual Tuition fee	Nil.
4. Annual Intake	10.
5. Annual Output	7.
6. Distinction awarded with recognition	The Certificate which is countersigned by the Director of Industries and Commerce, U. P., is awarded to successful candidates.
Remarks	This is a private institution aided by United Provinces Government.

XII. SUGAR TECHNOLOGY (INCLUDING SUGAR ENGINEERING)

The only institution offering facilities for training in different branches of Sugar Technology is the **Indian Institute of Sugar Technology, Kanpur**. Different courses, with details, offered by this institution are as follows .

1. Fellowship Course in Sugar Engineering.

1. Course of study with duration	A 1-year Fellowship Course in Sugar Engineering.
2. Minimum Admission qualification	Associates of the institute in Sugar Engineering.
3. Annual Tuition fee	Rs. 60.
4. Annual Intake	3.
5. Annual Output	Nil.
6. Distinction awarded with recognition	Fellowship diploma is awarded to students who complete their course. They are entitled to use F. I. I. S. E.

2. Fellowship course in Sugar Technology.

1. Course of study with duration . . . A 1-year Fellowship course in Sugar Technology.
2. Minimum Admission qualification . . . Associates of the Institute in Sugar Technology.
3. Annual Tuition fee . . . Rs. 60.
4. Annual Intake . . . 4.
5. Annual Output . . . 1.
6. Distinction awarded with recognition . . . Fellowship diploma is awarded to students who complete their course. They are entitled to use F. I. I. S. T.

3. Associateship course in Sugar Technology.

1. Course of study with duration . . . A 3-year Associateship course in Sugar Technology.
2. Minimum Admission qualification . . . B. Sc. with Physics, Chemistry, Mathematics.
3. Annual Tuition fee . . . Rs. 120.
4. Annual Intake . . . 12.
5. Annual Output . . . 7.
6. Distinction awarded with recognition . . . Associateship diploma is awarded to students who complete their course. They are entitled to use A. I. I. S. T.

4. Associateship course in Sugar Engineering.

1. Course of study with duration . . . A 2½ year Associateship Course in Sugar Engineering.
2. Minimum Admission qualification . . . B. Sc. in Engineering.
3. Annual Tuition fee . . . Rs. 120.
4. Annual Intake . . . 12.
5. Annual Output . . . Nil.
6. Distinction awarded with recognition . . . Associateship Diploma is awarded to students who complete their course. They are entitled to use A. I. I. S. E.

5. Certificate course in sugar Engineering.

1. Course of study with duration . . . A 1-year Certificate course in Sugar Engineering.
2. Minimum Admission qualification . . . Diploma in Engineering.
3. Annual Tuition fee . . . Rs. 60.
4. Annual Intake . . . 12.
5. Annual Output . . . Nil.
6. Distinction awarded with recognition . . . Certificate is awarded to successful candidates.

6. Certificate course in Sugar Boiling.

1. Course of study with duration . . . A 1-year Certificate course in Sugar Boiling.
2. Minimum Admission qualification . . . I. Sc. with a year's factory experience.
3. Annual Tuition fee . . . Rs. 60.
4. Annual Intake . . . 12.
5. Annual Output . . . 3.
6. Distinction awarded with recognition . . . Certificate is awarded to successful candidates.

7. Certificate course in Chemical control.

1. Course of study with duration . . . An 8-month course.
2. Minimum Admission qualification . . . B. Sc. with 8-month factory experience or I. Sc. with one year's factory experience.
3. Annual Tuition fee . . . Rs. 80.
4. Annual Intake . . . 6.
5. Annual Output . . . 4.
6. Distinction awarded with recognition . . . Certificate is awarded to successful candidates.

8. Certificate course in Pan Boiling.

1. Course of study with duration . . . A 4-month Certificate course in Pan Boiling.
2. Minimum Admission qualification . . . Matric with Science and one session sugar factory experience.
3. Annual Tuition fee . . . Rs. 40.
4. Annual Intake . . . 6.
5. Annual Output . . . 8.
6. Distinction awarded with recognition . . . Certificate is awarded to successful candidates.

9. Certificate course in Fuel and Boil Control.

1. Course of study with duration . . . A 4-month Certificate course.
2. Minimum Admission qualification . . . Shift Chemist or Shift Engineer, with 2 seasons of factory experience.
3. Annual Tuition fee . . . Rs. 40.
4. Annual Intake . . . 6.
5. Annual Output . . . 1.
6. Distinction awarded with recognition . . . Certificate is awarded to successful candidates.

10. Certificate course in Milling Plant Control Operation.

1. Course of study with duration . . . A 4-month Certificate course.
2. Minimum Admission qualification . . . I. Sc.
3. Annual Tuition fee . . . Rs. 60.
4. Annual Intake . . . 6.
5. Annual Output . . . 2.
6. Distinction awarded with recognition . . . Certificate is awarded to successful candidates.

11. Certificate course in Bacteriology.

1. Course of study with duration . . . An 8-month Certificate course in Bacteriology.
2. Minimum Admission qualification . . . B. Sc. in Chemistry.
3. Annual Tuition fee . . . Rs. 120.
4. Annual Intake . . . 6.
5. Annual Output . . . Nil.
6. Distinction awarded with recognition . . . Certificate is awarded to successful candidates.

12. Certificate Course in Statistics.

1. Course of study with duration . . . A 4-month Certificate course.
2. Minimum Admission qualification . . . I. Sc.
3. Annual Tuition fee . . . Rs. 60.
4. Annual Intake . . . 10.
5. Annual Output . . . 1.
6. Distinction awarded with recognition . . . Certificate is awarded to successful candidates.

13. *Certificate course in Statistical Methods.*

1. Course of study with duration	A 4-month Certificate course in Statistical methods.
2. Minimum Admission qualification	Post-graduate degree with research experience.
3. Annual Tuition fee	Rs. 60.
4. Annual Intake	10.
5. Annual Output	Nil.
6. Distinction awarded with recognition	Certificate is awarded to successful candidates.
Remarks	This is an institute controlled by the Sugar Committee of the Government of India and this is the only institution of its kind. There exist facilities for research in different branches of sugar industries.

XIII. TEXTILE TECHNOLOGY

There are four institutions offering courses in different branches of Textile Technology in this region. They are as follows:—

A.—Delhi Polytechnic, Delhi.*Diploma Course.*

1. Course of study with duration	A 3½-year Diploma course (inclusive of 6 months of practical training).
2. Minimum Admission qualification	Matriculation or equivalent.
3. Annual Tuition fee	Rs. 60.
4. Annual Intake	13.
5. Annual Output	6.
6. Distinction awarded with recognition	Diploma is awarded by the Delhi Polytechnic.

Certificate Course.

1. Course of study with duration	A 3-year part-time Certificate course.
2. Minimum Admission qualification	Matriculation or equivalent.
3. Annual Tuition fee	Rs. 36.
4. Annual Intake	12.
5. Annual Output	2.
6. Distinction awarded with recognition	Certificate is awarded by the Delhi Polytechnic.
Remarks	This is a unique institution under the control of the Ministry of Education, Government of India.

B.—Government Textile Institute, Kanpur*Diploma Course.*

1. Course of study with duration	A 4-year Diploma course (inclusive of one year of practical training).
2. Minimum Admission qualification	High School Examination passed.
3. Annual Tuition fee	Nil for U. P. students and Rs. 360 for non-U. P. students.
4. Annual Intake	47 (this includes students of Textile Chemistry course also).
5. Annual Output	16 (inclusive of Textile Chemistry students).
6. Distinction awarded with recognition	A Diploma in Textile Technology is awarded to successful candidates by the Department of Industries, Government of U. P. The Diploma-holders are entitled to use D. T. M.

Certificate Course.

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|---|---|
| 1. Course of study with duration | A 2-year Certificate course (Part-time). |
| 2. Minimum Admission qualification | Upto High School Examination standard. |
| 3. Annual Tuition fee | Nil for U. P. students and Rs. 360 for non-U. P. students. |
| 4. Annual Intake | 7 (including students of Textile Chemistry). |
| 5. Annual Output | 2. |
| 6. Distinction awarded with recognition | A certificate is awarded to successful candidates. |
| Remarks | This is an institution controlled by the United Provinces Government. |

C.—Government Central Weaving Institute, Banaras Cantonment, U. P.

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| 1. Course of study with duration | A 3-year Diploma course in Weaving. |
| 2. Minimum Admission qualification | Matriculation. |
| 3. Annual Tuition fee | Nil for U. P. students and Rs. 360 for non-U. P. students. |
| 4. Annual Intake | 20. |
| 5. Annual Output | 20. |
| 6. Distinction awarded with recognition | Diplomas are awarded to successful candidates. |
| Remarks | This is an experimental institution for hand-loom industries—Controlled by U. P. Government. |

D.—Punjab Institute of Textile Technology, Hall Gate, Amritsar, East Punjab.

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|---|---|
| 1. Course of study with duration | A 3-year Diploma course. |
| 2. Minimum Admission qualification | Matriculation. |
| 3. Annual Tuition fee | Not known. |
| 4. Annual Intake | 20. |
| 5. Annual Output | 12. |
| 6. Distinction awarded with recognition | Diplomas are awarded by Director of Industries, E. Punjab Government. |
| Remarks | This is an institution controlled by the E. Punjab Government. |

XIV. ART

There are three institutions in this region offering various courses in Arts. They are as follows :—

A.—Delhi Polytechnic, Delhi*Diploma Course.*

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| 1. Course of study with duration | A 5-year Diploma course in Arts. |
| 2. Minimum Admission qualification | Matriculation. |
| 3. Annual Tuition fee | Rs. 60. |
| 4. Annual Intake | 6. |
| 5. Annual Output | 3. |
| 6. Distinction awarded with recognition | All-India Diploma in Arts is awarded by the All-India Council for Technical Education. |

Certificate Course.

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| 1. Course of study with duration | A 3-year part-time Certificate course for ordinary grade—2 years more for senior grade. |
|--|---|

2. Minimum Admission qualification	. Matriculation.
3. Annual Tuition fee	. Rs. 36.
4. Annual Intake	. 9.
5. Annual Output	. 1.
6. Distinction awarded with recognition	. All-India Certificate in arts is awarded by the All-India Council for Technical Education.
Remarks	. This is a unique institution, controlled by the Ministry of Education, Government of India.

B.—Government school of Arts and Crafts, Lucknow, U. P.

Diploma Course.

1. Course of study with duration	. A 5-year diploma course in Fine and Industrial Arts.
2. Minimum Admission qualification	. Students having passed the Xth standard with ability to read English are eligible for diploma course.
3. Annual Tuition fee	. Nil for U. P. students and Rs. 360 for non-U. P. students.
4. Annual Intake	. 32.
5. Annual Output	. 11.
6. Distinction awarded with recognition	. Diplomas are awarded by the U. P. Govt.

Certificate Course.

1. Course of study with duration	. A 2-year Certificate course for Drawing Teachers' training.
2. Minimum Admission qualification	. High School Examination passed with ability to draw.
3. Annual Tuition fee	. Nil for U. P. students and Rs. 360 for non-U. P. students.
4. Annual Intake	. 8.
5. Annual Output	. 7.
6. Distinction awarded with recognition	. Certificates are awarded by U.P. Govt.
Remarks	. This Institution is under the control of the United Provinces Government.

C.—Government Technical Institute, Lucknow.

1. Course of study with duration	. A 3-year Certificate course in Painting.
2. Minimum Admission qualification	. Literate.
3. Annual Tuition fee	. Nil for U. P. students.
4. Annual Intake	. 10.
5. Annual Output	. 1.
6. Distinction awarded with recognition	. A certificate is awarded to successful candidates after completion of the course.
Remarks	. This is a U. P. Government controlled institution.

XV. ARCHITECTURE

The only institution in this region offering courses in Architecture is the **Delhi Polytechnic, Delhi**. Details of the courses are as follows :—

Diploma Course.

1. Course of study with duration	. A 6-year All-India Diploma course in Architecture including 1 year of practical training.
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2. Minimum Admission qualification	•	Matriculation or equivalent.
3. Annual Tuition fee	•	Rs. 60.
4. Annual Intake	•	12.
5. Annual Output	•	Nil.
6. Distinction awarded with recognition	•	Diploma is awarded to the successful candidates by the All-India Council for Technical Education.

Certificate Course.

1. Course of study with duration	•	A 6-year All-India Certificate course in Architecture including practical training. This is an evening course.
2. Minimum Admission qualification	•	Matriculation.
3. Annual Tuition fee	•	Rs. 36.
4. Annual Intake	•	12.
5. Annual Output	•	Nil.
6. Distinction awarded with recognition	•	Certificate is awarded to successful candidates by the All-India Council for Technical Education.
Remarks	•	This is a unique institution controlled directly by the Ministry of Education, Government of India.

XVI. COMMERCE

There are five institutions in this region offering courses in Commerce. They are as follows:—

A.—Department of Commerce, Banaras Hindu University, Banaras

Diploma Course.

1. Course of study with duration	•	A 2-year Diploma course.
2. Minimum Admission qualification	•	Matriculation.
3. Annual Tuition fee	•	Information not available for this report.
4. Annual Intake	•	134.
5. Annual Output	•	Information not available.
6. Distinction awarded with recognition	•	I. Com. diploma is awarded by Banaras Hindu University.

Degree Course.

1. Course of study with duration	•	A 2-year Degree course.
2. Minimum Admission qualification	•	I. Com.
3. Annual Tuition fee	•	Information not available.
4. Annual Intake	•	103.
5. Annual Output	•	Information not available.
6. Distinction awarded with recognition	•	B. Com. degree is awarded by Banaras Hindu University.

Post-Graduate Degree Course.

1. Course of study with duration	•	A 1-year Post-Graduate Degree course.
2. Minimum Admission qualification	•	B. Com.
3. Annual Tuition fee	•	Information not available for this report.
4. Annual Intake	•	20.
5. Annual Output	•	15.
6. Distinction awarded with recognition	•	M. Com. degree is awarded by Banaras Hindu University.
Remarks	•	This Institution also offers facilities for research work and awards Ph. D. degree in Commerce to those who have successfully completed their research work. This is awarded 2 years after M. Com.

B.—Bikram College of Commerce, Faridkot State, East Punjab

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| 1. Course of study with duration | A 2-year Degree course in Commerce. |
| 2. Minimum Admission qualification | I. Com. or equivalent. |
| 3. Annual Tuition fee | Rs. 120. |
| 4. Annual Intake | 4. |
| 5. Annual Output | Newly started. |
| 6. Distinction awarded with recognition | B. Com. degree of Punjab University. |
| Remarks | This institution is under the control of State Government, Faridkot State. |

C.—Delhi Polytechnic, Delhi

Diploma Course.

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|---|--|
| 1. Course of study with duration | A 3-year All-India Diploma course in Commerce. |
| 2. Minimum Admission qualification | Pre-Commerce or Higher Secondary School Leaving Certificate. |
| 3. Annual Tuition fee | Rs. 60. |
| 4. Annual Intake | 12. |
| 5. Annual Output | 10. |
| 6. Distinction awarded with recognition | Diploma is awarded to successful candidates by the All-India Board of Technical studies in Commerce and Business Administration under the All-India Council for Technical Education. All-India Diploma is recognised by certain Departments of the Central and Provincial Governments as equivalent to degree of an Indian University for employment in the office of the Auditor General in India, Accountant Generals and Controllers of Accounts (Provinces), Director of Railway Audits, Director of Audits, War and Supply, Controller of Food Accounts etc. and Central Board of Revenues. |

All India Certificate Course.

- | | |
|---|--|
| 1. Course of study with duration | A 3-year All-India Certificate course in Commerce (Evening course). |
| 2. Minimum Admission qualification | Matriculation. |
| 3. Annual Tuition fee | Rs. 36. |
| 4. Annual Intake | 15. |
| 5. Annual Output | 3. |
| 6. Distinction awarded with recognition | Certificate is awarded to successful candidates by the Commerce Board under All-India Council for Technical Education. |
| Remarks | This Institution is controlled by Central Government, Ministry of Education. |

D.—Seth G. B. Pader College of Commerce, Nawalgarh, Jaipur State

- | | |
|---|---|
| 1. Course of study with duration | A 2-year Degree course in Commerce. |
| 2. Minimum Admission qualification | I. Com. |
| 3. Annual Tuition fee | Details not available. |
| 4. Annual Intake | Details not available. |
| 5. Annual Output | Details not available. |
| 6. Distinction awarded with recognition | B. Com. degree is awarded to successful candidates by Rajputana University. |
| Remarks | This is a private institution run by Anandi Lal Pader Education Society. |

E.—Shyam Sunder Memorial College, Chandausi, United Provinces

Diploma Course

1. Course of study with duration	A 2-year Diploma course.
2. Minimum Admission qualification	High School Examination Passed.
3. Annual Tuition fee	Rs. 96.
4. Annual Intake	55.
5. Annual Output	40.
6. Distinction awarded with recognition	I. Com. Diploma of Agra University is awarded to successful candidates.

Degree Course

1. Course of study with duration	A 2-year Degree course.
2. Minimum Admission qualification	I. Com.
3. Annual Tuition fee	Rs. 120.
4. Annual Intake	22
5. Annual Output	Newly started.
6. Distinction awarded with recognition	B. Com. is awarded by Agra University to successful candidates.
Remarks	This is a private institution managed by a Board of Trustees.

CHAPTER III—REGIONAL FACILITIES

SOUTHERN REGION

Thirty-one Institutions of this region have furnished the requisite information in reply to the questionnaire (Appendix A) circulated to them. A list of these Institutions has been given at the end of Chapter I.

Of the thirty-one institutions, seven are residential, six are partly residential and the remaining eighteen are non-residential. Names of the residential, partly residential and non-residential institutions are given below:—

A. Residential—

1. Indian Institute of Science, Bangalore (S-2).
2. College of Engineering, Guindy, Madras (S-6).
3. Arthur Hope College of Technology, Coimbatore (S-5).
4. College of Engineering (Vizag), Coconada, Madras (S-8).
5. Engineering College, Anantpur, Madras (S-11).
6. Department of Engineering and Technology, Annamalai University, Annamalainagar (S-10).
7. Central College, Bangalore (S-29).

B. Partly Residential—

1. Jeypore Vikram Deo College of Science and Technology, Andhra University, Waltair (S-3).
2. Erskine College of Natural Science, Andhra University, Waltair (S-1).
3. College of Engineering, Bangalore (S-9).
4. Osmania Engineering College, Hyderabad, Deccan (S-12).
5. Central School of Arts and Crafts, Hyderguda, Hyderabad, Deccan (S-26).
6. Sanatan Dharma College, Alleppey, Travancore (S-31).

C. Non-Residential.

1. College of Engineering Travancore (S-17).
2. Alagappa Chettiar College of Technology, University of Madras, Saidapet, Guindy, Madras (S-4).
3. Sri Krishnarajendra Silver Jubilee Technological Institute, Bangalore (S-13).
4. Osmania Technical College, Hyderabad (Deccan) (S-18).
5. Government School of Technology, Broadway, Madras (S-14).
6. Government Textile Institute, Washermanpet, Madras (S-15).
7. Institute of Textile Technology, University of Travancore, Travancore (S-16).
8. Institute of Leather Technology, Washermanpet, Madras (S-17).
9. Sri Jayachamarajendra Occupational Institute, Bangalore, Mysore (S-19).
10. A. G. Polytechnic, Vuyyur, Madras (S-20).
11. Andhra Polytechnic, Coconada, Madras (S-21).
12. Central Polytechnic, Madras (S-22).
13. Dravida Polytechnic, Madura, Madras (S-23).
14. Kerala Polytechnic, Calicut, Madras (S-24).
15. Karnataka Polytechnic, Mangalore, Madras (S-25).
16. H. H. The Maharaja's School of Arts, Travancore (S-27).
17. School of Arts and Crafts, Poonamali High Road, Madras (S-28).
18. Central College of Commerce, Saifabad, Hyderabad (Deccan) (S-30).

Training facilities in twenty branches of studies covering various courses in Engineering, Technology, Art, and Commerce are available in these Institutions.

Details of various courses of studies and other relevant information in this connection are given hereafter.

I.—AERONAUTICAL ENGINEERING

There are two Institutions in this Region which offer facilities for courses of study in Aeronautical Engineering. Details are as follows :—

A.—Indian Institute of Science, Bangalore

Diploma Course

- | | |
|---|---|
| 1. Course of study with duration | A 2-year diploma course (including 4 months of practical training). |
| 2. Minimum Admission qualification | B.E. or equivalent. |
| 3. Annual Tuition fee | Rs. 96. |
| 4. Annual Intake | 10. |
| 5. Annual Output | 18 (in 1946). |
| 6. Distinction awarded with recognition | Diplomas are awarded by the Institution to successful candidates. The diploma-holders can use the initials D.I.I. Sc. |

Associateship Course

1. Course of study with duration	A 2½-year Associateship course.
2. Minimum Admission qualification	B.Sc. (Hons. I) in Physics or D.I.I.Sc.
3. Annual Tuition fee	Rs. 96.
4. Annual Intake	3.
5. Annual Output	1.
6. Distinction awarded with recognition	Associateship diplomas are awarded by the Institution to successful candidates. The Associateship holders can use the initials A.I.I.Sc.
Remarks	This Institution is supervised by the Government of India.

B.—College of Engineering (Vizag), Coconada, Madras

1. Course of study with duration	A 4-year degree course.
2. Minimum Admission qualification	I.Sc. or I.A. with Science.
3. Annual Tuition fee	Rs. 180.
4. Annual Intake	} Details not available.
5. Annual Output	
6. Distinction awarded with recognition	} Details not available.
Remarks	

This is a Madras Government Institution and affiliated to Andhra University. This has been lately started and the courses are still in formative stage.

II.—AUTOMOBILE ENGINEERING

There are three Institutions, offering courses in Automobile Engineering. Details are as follows :—

A.—Arthur Hope College of Technology, Coimbatore

1. Course of study with duration	A 4-year degree course.
2. Minimum Admission qualification	I.Sc. or I.A. with Science.
3. Annual Tuition fee	Rs. 180.
4. Annual Intake	96 (including students of the other courses of study offered by the Institution).
5. Annual Output	Newly started in 1945.
6. Distinction awarded with recognition	B.E. degree will be awarded by the Madras University to successful candidates.
Remarks	This Institution is controlled by the Madras Government.

B.—Dravida Polytechnic, Madura, Madras

1. Course of study with duration	A 3-year diploma course.
2. Minimum Admission qualification	S.S.L.C.
3. Annual Tuition fee	Rs. 36.
4. Annual Intake	20.
5. Annual Output	Newly started.
6. Distinction awarded with recognition	Diplomas are to be awarded by the Madras Government to successful candidates.
Remarks	This Institution is under the control of the Director of Industries, Madras, and is still in the formative stage.

C.—Karnataka Polytechnic, Mangalore

1. Course of study with duration	A 3-year diploma course.
2. Minimum Admission qualification	S.S.L.C.
3. Annual Tuition fee	Rs. 36.
4. Annual Intake	20.
5. Annual Output	Newly started.

6. Distinction awarded with recognition. The diplomas will be awarded to the successful candidates by the Director of Industries, Madras.
- Remarks This Institution is under the control of Madras Government and is still in a formative stage.

III.—CHEMICAL ENGINEERING

Five Institutions, as detailed below, offer facilities for study in Chemical Engineering :—

A.—Alagappa Chettiar College of Technology, Guindy, Madras.

1. Course of study with duration . . . A 2½-year degree course (inclusive of 3 months, practical training).
 2. Minimum Admission qualification . . B.Sc.
 3. Annual Tuition fee Rs. 200.
 4. Annual Intake 19.
 5. Annual Output 18.
 6. Distinction awarded with recognition . B.Sc. (Tech.) is awarded by the Madras University to a successful candidate.
- Remarks This Institution is under the control of Madras University and provides facilities for researches in Chemical Engineering.

B.—Department of Engineering and Technology, Annamalai University, Annamalainagar, Madras.

1. Course of study with duration . . . A 4-year degree course with six months of practical training.
 2. Minimum Admission qualification . . I.Sc.
 3. Annual Tuition fee Rs. 180.
 4. Annual Intake 28.
 5. Annual Output Newly started.
 6. Distinction awarded with recognition . B.Sc. (Tech.) will be awarded by the Annamalai University to a successful candidate.
- Remarks This Institution is under the control of the Annamalai University.

C.—College of Engineering, Bangalore.

1. Course of study with duration . . . A 4½-year degree course.
 2. Minimum Admission qualification . . I.Sc.
 3. Annual Tuition fee Rs. 150.
 4. Annual Intake 170 (including students of other courses).
 5. Annual Output Newly started.
 6. Distinction awarded with recognition . B.E. in Chemical Engineering will be awarded by the Mysore University to successful candidates.
- Remarks This Institution is controlled by Mysore State Government.

D.—Indian Institute of Science, Bangalore.

1. Course of study with duration . . . A 3-year diploma course (inclusive of two months practical training).
2. Minimum Admission qualification . . B.Sc. (Hons. First Class).
3. Annual Tuition fee Rs. 96.
4. Annual Intake 9/10.
5. Annual Output 10.
6. Distinction awarded with recognition . Diplomas are awarded to successful candidates. Diploma-holders are entitled to use the initials D.I.I.Sc.

Remarks	This Institution is under the supervision of the Government of India. Diplomas of this Institution are recognised as equivalent to Degrees of the Indian Universities.
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E.—Kerala Polytechnic, Calicut, Madras.

1. Course of study with duration	A 3-year diploma course.
2. Minimum Admission qualification	S.S.L.C.
3. Annual Tuition fee	Rs. 36.
4. Annual Intake	20.
5. Annual Output	Newly started.
6. Distinction awarded with recognition	The diploma is to be awarded by the Director of Industries, Government of Madras.
Remarks	This Institution is under the control of Madras Government and is still in the formative stage.

IV.—CIVIL ENGINEERING

There are fifteen Institutions offering various courses of studies in Civil Engineering. Details are as follows :—

A.—Department of Engineering and Technology, Annamalai University Annamalainagar.

Degree Course

1. Course of study with duration	A 4-year course.
2. Minimum Admission qualification	I.Sc.
3. Annual Tuition fee	Rs. 180.
4. Annual Intake	50.
5. Annual Output	Degree course newly started.
6. Distinction awarded with recognition	B.E. in Civil Engineering will be awarded by the Annamalai University to successful candidates.

Diploma Course

1. Course of study with duration	A 2-year course.
2. Minimum Admission qualification	S.S.L.C.
3. Annual Tuition fee	Rs. 180.
4. Annual Intake	79.
5. Annual Output	12.
6. Distinction awarded with recognition	An Overseer's diploma will be awarded to successful candidates.
Remarks	This Institution is under the control of Annamalai University.

B.—A. G. Polytechnic, Vuyyur, Madras.

1. Course of study with duration	A 3-year diploma course.
2. Minimum Admission qualification	S.S.L.C.
3. Annual Tuition fee	Rs. 36.
4. Annual Intake	20.
5. Annual Output	Newly started in 1946.
6. Distinction awarded with recognition	A diploma will be awarded to a successful candidate by the Director of Industries, Government of Madras.
Remarks	This Institution is under the control of the Government of Madras and is still in the formative stage.

C.—Andhra Polytechnic, Coconada, Madras.

- | | |
|---|---|
| 1. Course of study with duration | A 3-year diploma course. |
| 2. Minimum Admission qualification | S. S. L. C. |
| 3. Annual Tuition fee | Rs. 36. |
| 4. Annual Intake | 20. |
| 5. Annual Output | Newly started in 1946. |
| 6. Distinction awarded with recognition | A diploma will be awarded to successful candidates by the Director of Industries, Government of Madras. |
| Remarks | This institution is still in the formative stage and controlled by the Government of Madras. |

D.—Arthur Hope College of Technology, Coimbatore, Madras.

- | | |
|---|---|
| 1. Course of study with duration | A 4-year degree course. |
| 2. Minimum Admission qualification | I. A. with Science. |
| 3. Annual Tuition fee | Rs. 180. |
| 4. Annual Intake | 96 (sum-total for all the branches of studies offered by the institution). |
| 5. Annual Output | Started in 1945. |
| 6. Distinction awarded with recognition | B. E. degree in Civil Engineering will be awarded to successful candidates. |
| Remarks | This institution is under the control of Government of Madras. |

E.—Central Polytechnic, Madras.

- | | |
|---|--|
| 1. Course of study with duration | A 3-year diploma course. |
| 2. Minimum Admission qualification | S. S. L. C. |
| 3. Annual Tuition fee | Rs. 36. |
| 4. Annual Intake | 20. |
| 5. Annual Output | Started only in 1946. |
| 6. Distinction awarded with recognition | A diploma will be awarded by the Director of Industries, Government of Madras. |
| Remarks | This institution is still in the formative stage and controlled by the Government of Madras. |

F.—College of Engineering, Guindy, Madras.

Degree Course.

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|---|--|
| 1. Course of study with duration | A 4-year course. |
| 2. Minimum Admission qualification | I. A. with Science. |
| 3. Annual Tuition fee | Rs. 180. |
| 4. Annual Intake | 124 (total, including students of other branches of studies offered by the institution). |
| 5. Annual Output | 65 (including students of other branches of studies). |
| 6. Distinction awarded with recognition | B. E. in Civil Engineering of Madras University is awarded to a successful candidate. |

Diploma Course.

- | | |
|---|---|
| 1. Course of study with duration | A 4-year course. |
| 2. Minimum Admission qualification | S. S. L. C. |
| 3. Annual Tuition fee | Rs. 60. |
| 4. Annual Intake | 20 |
| 5. Annual Output | 57. |
| 6. Distinction awarded with recognition | L. C. E. diplomas are awarded to students who successfully complete their diploma course. |

Remarks This institution which is under the control of Madras Government has provision for researches.

G.—College of Engineering (Vizag), Coconada, Madras.

1. Course of study with duration	A 4-year degree course.
2. Minimum Admission qualification	I. A. with Science.
3. Annual Tuition fee	Rs. 216.
4. Annual Intake	105 (total for all branches of studies offered by the institution).
5. Annual Output	Newly started.
6. Distinction awarded with recognition	B. E. degree of the Andhra University.
Remarks	This institution is still in the formative stage and is controlled by the Madras Government.

H.—College of Engineering, University of Travancore, Trivandrum.

Degree Course.

1. Course of study with duration	A 5-year course including 1 year of practical training.
2. Minimum Admission qualification	I. Sc.
3. Annual Tuition fee	Rs. 200.
4. Annual Intake	49 (Sum-total for all branches of degree course offered by the Institution).
5. Annual Output	9.
6. Distinction awarded with recognition	B. E. in Civil Engineering of Travancore University.

Diploma Course.

1. Course of study with duration	A 3-year course.
2. Minimum Admission qualification	E. S. L. C.
3. Annual Tuition fee	Rs. 80.
4. Annual Intake	53 (Sum-total for all branches of diploma courses offered by the institution).
5. Annual Output	9.
6. Distinction awarded with recognition	A diploma in Civil Engineering awarded to the students completing the course.
Remarks	This institution is controlled by the Travancore State Government. The institution offers elective courses in Highway Engineering, Structural Engineering, Irrigation and Public Health Engineering and also offers facilities for researches in Testing materials and Hydraulics.

I.—College of Engineering, Bangalore.

1. Course of study with duration	A 4½-year degree course including six months of practical training.
2. Minimum Admission qualification	I. Sc.
3. Annual Tuition fee	Rs. 150.
4. Annual Intake	170 (Sum-total for all branches of studies offered by the institution).
5. Annual Output	141 (Sum-total for all branches of studies offered by the institution).
6. Distinction awarded with recognition	B. E. degree in Civil Engineering is awarded by the Mysore University.
Remarks	This institution is under the control of Mysore State Government.

J.—Engineering College, Anantpur, Madras.

- | | |
|---|--|
| 1. Course of study with duration | A 4-year degree course. |
| 2. Minimum Admission qualification | I. A. with Science. |
| 3. Annual Tuition fee | Rs. 180. |
| 4. Annual Intake | 50 (Sum-total for all branches of studies offered by the institution). |
| 5. Annual Output | Started only in 1946. |
| 6. Distinction awarded with recognition | B. E. degree in Civil Engineering of Madras University will be awarded to successful candidates. |
| Remarks | This institution is still under formation and is controlled by Madras Government. |

K.—Dravida Polytechnic, Madura, Madras.

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|---|--|
| 1. Course of study with duration | A 3-year diploma course. |
| 2. Minimum Admission qualification | S. S. L. C. |
| 3. Annual Tuition fee | Rs. 36. |
| 4. Annual Intake | 20. |
| 5. Annual Output | Newly started in 1946. |
| 6. Distinction awarded with recognition | A diploma will be awarded to successful candidates by the Director of Industries, Madras Government. |
| Remarks | This institution is still in the formative stage and is controlled by the Madras Government. |

L.—Government School of Technology, Madras.

- | | |
|---|---|
| 1. Course of study with duration | A 4-year diploma course. |
| 2. Minimum Admission qualification | S. S. L. C. |
| 3. Annual Tuition fee | Rs. 36. |
| 4. Annual Intake | 103 (Sum-total for all branches of studies offered by the institution). |
| 5. Annual Output | This course is newly started. |
| 6. Distinction awarded with recognition | A diploma L. C. E. will be awarded to successful candidates by Madras Government. |
| Remarks | This is a Madras Government Institution. |

M.—The Karnataka Polytechnic, Mangalore, Madras.

- | | |
|---|---|
| 1. Course of study with duration | A 3-year diploma course. |
| 2. Minimum Admission qualification | S. S. L. C. |
| 3. Annual Tuition fee | Rs. 36. |
| 4. Annual Intake | 20. |
| 5. Annual Output | Newly started in 1946. |
| 6. Distinction awarded with recognition | A diploma will be awarded to successful candidates by the Director of Industries, Government of Madras. |
| Remarks | This institution is still in the formative stage and is controlled by the Government of Madras. |

N.—Osmania Engineering College, Lallguda, Hyderabad (Deccan).

- | | |
|---|---|
| 1. Course of study with duration | A 3½-year degree course inclusive of six months practical training. |
| 2. Minimum Admission qualification | I. Sc. |
| 3. Annual Tuition fee | } Information not available. |
| 4. Annual Intake | |
| 5. Annual Output | |
| 6. Distinction awarded with recognition | 10. B. E. degree in Civil Engineering is awarded by Osmania University. |
| Remarks | This institution is controlled by the Government of H. E. H. the Nizam. |

O.—Sri Jayachamarajendra Occupational Institute, Bangalore

Diploma Course

1. Course of study with duration . . .	A 3-year diploma course.
2. Minimum Admission qualification . . .	S. S. L. C.
3. Annual Tuition fee	Rs. 100.
4. Annual Intake	30.
5. Annual Output	Information not available.
6. Distinction awarded with recognition	Diplomas are awarded in respective courses by the institution.

Certificate Course

1. Course of study with duration . . .	A 2-year certificate course.
2. Minimum Admission qualification . . .	S. S. L. C.
3. Annual Tuition fee	Rs. 25 for Mysorians and Rs. 50 for non-Mysorians.
4. Annual Intake	30.
5. Annual Output	Information not available.
6. Distinction awarded with recognition	Certificates are awarded by the institution.
Remark.	This institution is controlled by the Government of Mysore.

V. ELECTRICAL ENGINEERING .

Fourteen institutions offer facilities for various courses in electric engineering. Details are as follows :—

A.—Andhra Polytechnic, Coconada, Madras

1. Course of study with duration . . .	A 3-year diploma course.
2. Minimum Admission qualification . . .	S. S. L. C.
3. Annual Tuition fee	Rs. 36.
4. Annual Intake	20.
5. Annual Output	Started only in 1946.
6. Distinction awarded with recognition	A diploma will be awarded to successful candidates by the Director of Industries, Government of Madras.
Remarks	This institution is still in the formative stage and controlled by the Government of Madras. Five more such institutions are launched by the same Government as part of their post-war technical education scheme.

B.—Arthur Hope College of Technology, Coimbatore, Madras

1. Course of study with duration . . .	A 4-year degree course.
2. Minimum Admission qualification . . .	I. A. with science.
3. Annual Tuition fee	Rs. 180.
4. Annual Intake	96 (in total, including students of other branches of studies offered by the institution).
5. Annual Output	Newly started in 1946.
6. Distinction awarded with recognition	B. E. degree in Electrical Engineering will be awarded by Madras University.
Remarks	This institution is still in the formative stage and is controlled by the Government of Madras.

C.— Department of Engineering & Technology, Annamalai University, Annamalainagar, Madras

1. Course of study with duration	. A 4-year degree course including one year of practical training.
2. Minimum Admission qualification	. I. Sc.
3. Annual Tuition fee	. Rs. 180.
4. Annual Intake	. 30.
5. Annual Output	. Newly started—probable output 25 in 1949.
6. Distinction awarded with recognition	. B. E. degree in Electrical Engineering will be awarded by the Annamalai University.
Remarks	. This institution is under the control of Annamalai University.

D.— Central Polytechnic, Madras

1. Course of study with duration	. A 3-year diploma course.
2. Minimum Admission qualification	. S. S. L. C.
3. Annual Tuition fee	. Rs. 36.
4. Annual Intake	. 20.
5. Annual Output	. Newly started in 1946.
6. Distinction awarded with recognition	. The Diploma will be awarded by the Director of Industries, Government of Madras.
Remarks	. This institution is still under formation and controlled by Madras Government. This is one of the six Polytechnics started by Madras Government in 1946 as part of their post-war scheme.

E.— College of Engineering, Travancore.

Degree Course

1. Course of study with duration	. A 5-year degree course including one year of practical training.
2. Minimum Admission qualification	. I. Sc.
3. Annual Tuition fee	. Rs. 200.
4. Annual Intake	. 49 (Sum-total for all the branches of studies of degree standard offered by the Institution).
5. Annual Output	. 10.
6. Distinction awarded with recognition	. B. E. degree in Electrical Engineering is awarded by the Travancore University to a successful candidate.

Diploma Course

1. Course of study with duration	. A 3-year diploma course.
2. Minimum Admission qualification	. E. S. L. C.
3. Annual Tuition fee	. Rs. 80.
4. Annual Intake	. 53 (Sum-total for all the branches of studies of diploma standard offered by the institution).
5. Annual Output	. 10 in each course.
6. Distinction awarded with recognition	. Diploma in Electrical Engineering is awarded by the Travancore University to the candidates who complete the course successfully.

Remarks	This institution is under the control of Travancore State Government. The institution provides facilities for researches in standardisation, industrial testing, design and construction of motors up to 10 H. P. Special electives are offered in communication engineering, High Voltage and Power Supply Engineering.
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F.—College of Engineering (Vizag), Coconada

1. Course of study with duration	A 4-year degree course.
2. Minimum Admission qualification	I. A. with Science.
3. Annual Tuition fee	Rs. 216.
4. Annual Intake	105 (Sum-total for all branches of studies offered by the institution).
5. Annual Output.	Newly started in 1946.
6. Distinction awarded with recognition	B. E. in Electrical Engineering will be awarded by the Andhra University to successful candidates.

Remarks	This institution is under the control of the Madras Government.
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G.—College of Engineering, Guindy, Madras

1. Course of study with duration	A 4-year degree course.
2. Minimum Admission qualification	I. A. with science.
3. Annual Tuition fee	Rs. 180.
4. Annual Intake	124 (Total in all branches of studies of degree standard offered by the institution).
5. Annual Output.	60 (total in all branches of studies of degree standard offered by the institution).
6. Distinction awarded with recognition	B. E. in Electrical Engineering is awarded by the Madras University to successful candidates.

Remarks	This institution is under the control of the Government of Madras and has provision for research work in all its laboratories.
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H.— College of Engineering, Bangalore

1. Course of study with duration	A 4½-year degree course including six months of practical training.
2. Minimum Admission qualification	I. Sc.
3. Annual Tuition fee	Rs. 150.
4. Annual Intake	170 (Sum-total for all branches of studies of degree standard offered by the institution).
5. Annual Output	141 (Sum-total for all branches of studies of degree standard offered by the institution).
6. Distinction awarded with recognition	B. E. degree in electrical engineering is awarded by the Mysore University to a successful candidate.

Remarks	This institution is under the control of the Mysore Government.
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I.—Dravida Polytechnic, Madura, Madras

1. Course of study with duration	A 3-year diploma course.
2. Minimum Admission qualification	S. S. L. C.
3. Annual Tuition fee	Rs. 36.
4. Annual Intake	21.

5. Annual Output Started only in 1946.
6. Distinction awarded with recognition . The Diploma will be awarded by the Director of Industries, Government of Madras, to a successful candidate.
- Remarks This institution is a Madras Government controlled institution and was started along with five other Polytechnics by the same Government as a part of their post-war scheme.

J.—Kerala Polytechnic, Calicut

1. Course of study with duration . . A 3-year diploma course.
2. Minimum Admission qualification . S. S. L. C.
3. Annual Tuition fee Rs. 36.
4. Annual Intake 20.
5. Annual Output Started only in 1946.
6. Distinction awarded with recognition . A diploma will be awarded by the Director of Industries, Government of Madras, to a successful candidate.
- Remarks This is one of the six Polytechnics started by the Madras Government in 1946—as part of their Post-war Technical Education scheme.

K.—Engineering College, Anantpur, Madras

1. Course of study with duration . . A 4-year degree course.
2. Minimum Admission qualification . I. A. with Science.
3. Annual Tuition fee Rs. 180.
4. Annual Intake 50 (Sum-total for all branches of studies of degree standard offered by the Institution).
5. Annual output Newly started.
6. Distinction awarded with recognition . B. E. degree in Electrical Engineering will be awarded by the Madras University to a successful candidate.
- Remarks This institution is under the control of the Madras Government and at present classes are being held at the premises of the College of Engineering (Guindy), Madras.

L.—Government School of Technology, Broadway, Madras.

1. Course of study with duration . . A 4-year diploma course.
2. Minimum Admission qualification . S. S. L. C.
3. Annual Tuition fee Rs. 36.
4. Annual Intake 79.
5. Annual Output 22.
6. Distinction awarded with recognition . A Diploma L. E. E. is awarded to a successful candidate by Madras Government.
- Remarks This institution is under the control of the Director of Industries, Government of Madras.

M.—Indian Institute of Science, Bangalore

- 1 Course of study with duration . . A 3-year diploma course in Electrical Technology including six months of practical training.
2. Minimum Admission qualification . B. Sc. (Hons. I) or B. E. in Electrical or Mechanical Engineering.
3. Annual Tuition fee Rs. 72.
4. Annual Intake 30.
5. Annual Output 27.

6. Distinction awarded with recognition A diploma is awarded to a successful candidate. The diploma-holders are entitled to use the initial D. I. I. Sc. and the diploma is recognised as equivalent to a degree of an Indian University.
- Remarks This institution is supervised by the Central Government. Specialised training are given in two branches of Electrical Technology—(1) Heavy electrical engineering and (2) Feeble current engineering and facilities for research works are also available in the Institute.

N.—Sri Jayachamarajendra Occupational Institute, Bangalore

Diploma Course

1. Course of study with duration A 3-year diploma course.
2. Minimum Admission qualification S. S. L. C.
3. Annual Tuition fee Rs. 100.
4. Annual Intake 30.
5. Annual Output 109 (Sum-total for all the branches of study offered by the institution).
6. Distinction awarded with recognition Diplomas are awarded to successful candidates.

Certificate Course

1. Course of study with duration A 2-year certificate course.
 2. Minimum Admission qualification S. S. L. C.
 3. Annual Tuition fee Rs. 100.
 4. Annual Intake 30.
 5. Annual Output No information available.
 6. Distinction awarded with recognition Certificates are awarded to successful candidates.
- Remarks This institution is under the control of Mysore State Government.

VI. HIGHWAY ENGINEERING

There are three institutions offering courses in Highway Engineering They are as detailed below :—

A.—College of Engineering, Guindy, Madras

1. Course of study with duration A 4-year degree course.
 2. Minimum Admission qualification I. A. with Science.
 3. Annual Tuition fee Rs. 180.
 4. Annual Intake 124 (Sum-total for all branches of studies offered by the Institution).
 5. Annual Output The course has been recently started.
 6. Distinction awarded with recognition B. E. degree in Highway Engineering will be awarded by Madras University to successful candidates.
- Remarks This institution is under the control of the Government of Madras.

B.—College of Engineering (Vizag), Coconada, Madras.

1. Course of study with duration A 4-year degree course.
2. Minimum Admission qualification I. A. with Science.
3. Annual Tuition fee Rs. 180.

4. Annual Intake	105 (Sum-total for all branches of studies offered by the institution).
5. Annual Output	Newly started.
6. Distinction awarded with recognition .	B. E. degree in Highway Engineering of Andhra University will be awarded.
Remarks	This institution has been newly started by the Madras Government.

C.—Engineering College, Anantpur, Madras

1. Course of study with duration . . .	A 4-year degree course.
2. Minimum Admission qualification . .	I. A. with Science.
3. Annual Tuition fee	Rs. 180.
4. Annual Intake	50 (Total in all branches of studies offered by the Institution).
5. Annual Output	The course has been newly started.
6. Distinction awarded with recognition .	B. E. degree in Highway Engineering will be awarded to successful candidates by the Madras University.
Remarks	This institution is still in the formative stage and under the control of the Government of Madras. The institution is now located in the premises of the College of Engineering, Guindy, Madras.

VII. INTERNAL COMBUSTION ENGINEERING

There is only one institution namely **The Indian Institute of Science, Bangalore**, offering the course in Internal Combustion Engineering.

1. Course of study with duration . . .	A 2-year post-graduate diploma course including 4 months of practical training.
2. Minimum Admission qualification . .	B. E. in Mechanical Engineering.
3. Annual Tuition fee	Rs. 96.
4. Annual Intake	8.
5. Annual Output	Recently started. No output as yet.
6. Distinction awarded with recognition .	A diploma of the Institute will be awarded to the successful candidates.
Remarks	This institution is under the supervision of the Central Government. Research work is obligatory for obtaining the diploma.

VIII. MECHANICAL ENGINEERING

There are fifteen institutions offering various courses in Mechanical Engineering as detailed below :—

A.—Department of Engineering and Technology, Annamalai University, Annamalai Nagar

1. Course of study with duration . . .	A 4-year degree course.
2. Minimum Admission qualification . .	I. Sc.
3. Annual Tuition fee	Rs. 180.
4. Annual Intake	20.
5. Annual Output	Newly started. No output as yet.
6. Distinction awarded with recognition .	B. E. in Mechanical Engineering will be awarded by the Annamalai University to the successful candidates.
Remarks	This institution is under the control of the Annamalai University.

B.—A. G. Polytechnic, Vuyyur, Madras.

1. Course of study with duration A. 3-year diploma course.
2. Minimum Admission qualification S. S. L. C.
3. Annual Tuition fee Rs. 36.
4. Annual Intake 20.
5. Annual Output Newly started—No output/as yet.
6. Distinction awarded with recognition A diploma in Mechanical Engineering will be awarded to a successful candidate.
- Remarks This is one of the six Polytechnics started in 1946 by the Madras Government.

C.—Andhra Polytechnic, Coconada, Madras.

1. Course of study with duration A 3-year diploma course.
2. Minimum Admission qualification S. S. L. C.
3. Annual Tuition fee Rs. 36.
4. Annual Intake 20.
5. Annual Output Newly started.
6. Distinction awarded with recognition A diploma in Mechanical Engineering will be awarded to a successful candidate.
- Remarks This is one of the six Polytechnics started by the Government of Madras in 1946.

D.—College of Engineering, Guindy, Madras.

1. Course of study with duration A 4-year degree course.
2. Minimum Admission qualification I. A. with Science.
3. Annual Tuition fee Rs. 180.
4. Annual Intake 124 (Sum-total for all branches of studies offered by the Institution)
5. Annual Output 65 (Sum-total for all branches of studies offered by the Institution.)
6. Distinction awarded with recognition. B. E. degree in Mechanical Engineering is awarded by the Madras University to a successful candidate.
- Remarks. This institution is under the control of the Government of Madras. The Institution offers facilities for research in all branches of studies provided there.

E.—College of Engineering (Vizag), Coconada, Madras

1. Course of study with duration. A 4-year degree course.
2. Minimum Admission qualification. I.A. with Science.
3. Annual Tuition fee Rs. 216/-
4. Annual Intake 105 (Sum-total for all branches of studies offered by the institution).
5. Annual Output Newly started. No output as yet.
6. Distinction awarded with recognition. B. E. degree in Mechanical Engineering will be awarded by the Andhra University to a successful candidate.
- Remarks. This institution has been newly started by the Madras Government.

F.—College of Engineering, Travancore.*Degree course*

1. Course of study with duration. A 5-year degree course including one year of practical training.
2. Minimum Admission qualification I. Sc.

3. Annual Tuition fee Rs. 200.
4. Annual Intake 49 (Sum-total for all branches of such studies offered).
5. Annual Output 10.
6. Distinction awarded with recognition. B. E. degree in Mechanical Engineering is awarded by the Travancore University to a successful candidate.

Diploma course

1. Course of study with duration. A 3-year diploma course.
 2. Minimum Admission qualification E.S.L.C.
 3. Annual Tuition fee Rs. 80.
 4. Annual Intake 53 (Sum-total for all branches of such studies offered).
 5. Annual Output 10.
 6. Distinction awarded with recognition. A diploma in Mechanical Engineering is awarded by the Travancore University to a successful student.
- Remarks. This institution is controlled by Travancore State Government and offers facilities for researches in Fuel, I. C. Engines, Gas Producers and Heat Treatment of Steel.

G.—College of Engineering, Bangalore

1. Course of study with duration. A 4½-year degree course including 6 months of practical training.
 2. Minimum Admission qualification I.Sc.
 3. Annual Tuition fee Rs. 150.
 4. Annual Intake 170 (Sum-total for all branches of studies offered by the institution).
 5. Annual Output 141 (Sum-total for all branches of studies offered by the institution).
 6. Distinction awarded with recognition. B. E. degree in Mechanical Engineering is awarded to a successful candidate by the Mysore University.
- Remarks. This institution is under the control of the Mysore State Government.

H.—Central Polytechnic, Madras

1. Course of study with duration. A 3-year diploma course.
 2. Minimum Admission qualification S.S.L.C.
 3. Annual Tuition fee Rs. 36.
 4. Annual Intake 20.
 5. Annual Output Newly started.
 6. Distinction awarded with recognition. A diploma in Mechanical Engineering will be awarded to a successful candidate by the Director of Industries, Madras Government.
- Remarks. This is one of the six Polytechnics started by the Madras Government in 1946 as a part of their post-war technical educational scheme. The institution is still in the formative stage.

I.—Dravida Polytechnic, Madura, Madras

1. Course of study with duration. A 3-year diploma course.
2. Minimum Admission qualification. S.S.L.C.
3. Annual Tuition fee Rs. 36.
4. Annual Intake 20.

5. Annual Output Newly started.
6. Distinction awarded with recognition. A diploma in Mechanical Engineering will be awarded to a successful candidate by the Director of Industries, Madras Government.
- Remarks. This is one of the six Polytechnics started by the Madras Government in 1946. This institution is still in the formative stage.

J.—Engineering College, Anantpur, Madras.

1. Course of study with duration. A 4-year degree course.
2. Minimum Admission qualification. I.A. with Science.
3. Annual Tuition fee Rs. 180.
4. Annual Intake 50 (Sum-total for all branches of studies of degree standard offered by the Institution).
5. Annual Output Newly started—No output as yet.
6. Distinction awarded with recognition. B. E. degree in Mechanical Engineering will be awarded by the Madras University to a successful candidate.
- Remarks. This institution has been recently started by the Madras Government. The classes are held in the premises of the College of Engineering, Guindy, Madras.

K.—Government School of Technology, Pophams, Broadway, Madras.

1. Course of study with duration. A 4-year diploma course.
2. Minimum Admission qualification. S.S.L.C.
3. Annual Tuition fee Rs. 36.
4. Annual Intake 62.
5. Annual Output 19.
6. Distinction awarded with recognition. A diploma L.M.E. is awarded to successful candidates by the Madras Government.
- Remarks. This institution is controlled by the Director of Industries, Madras Government.

L.—Karnataka Polytechnic, Mangalore, Madras.

1. Course of study with duration. A 3-year diploma course.
2. Minimum Admission qualification S.S.L.C.
3. Annual Tuition fee Rs. 36.
4. Annual Intake 20.
5. Annual Output Newly started
6. Distinction awarded with recognition. A diploma in Mechanical Engineering will be awarded to a successful candidate by the Director of Industries, Government of Madras.
- Remarks. This is one of the six Polytechnics recently started by the Madras Government. This institution is still in the formative stage.

M.—Kerala Polytechnic, Calicut, Madras.

1. Course of study with duration A 3-year diploma course.
2. Minimum Admission qualification. S.S.L.C.
3. Annual Tuition fee Rs. 36.
4. Annual Intake 20.
5. Annual Output Newly started.
6. Distinction awarded with recognition. A diploma in Mechanical Engineering will be awarded to a successful candidate by the Director of Industries, Government of Madras.

Remarks This is one of the six Polytechnics recently started by the Madras Government. This institution is still in the formative stage.

N.—Osmania Engineering College, Lallguda, Hyderabad (Deccan).

1. Course of study with duration. . . A 3½-year degree course including 6 months of practical training.
2. Minimum Admission qualification . . I.Sc.
3. Annual Tuition fee No information available.
4. Annual Intake 55.
5. Annual Output 3.
6. Distinction awarded with recognition. A B. E. degree in Mechanical Engineering is awarded to a successful candidate by the Osmania University.

Remarks. This institution is controlled by H.E.H. The Nizam's Government.

O.—Sri Jayachamarajendra Occupational Institute, Bangalore, Mysore.

Diploma Course

1. Course of study with duration. . . A 3-year course.
2. Minimum Admission qualification . . S.S.L.C.
3. Annual Tuition fee Rs. 100/-
4. Annual Intake 20.
5. Annual Output Information not available.
6. Distinction awarded with recognition A diploma is awarded to a successful candidate.

Certificate Course

1. Course of study with duration. . . A 2-year course.
2. Minimum Admission qualification . . S.S.L.C.
3. Annual Tuition fee Rs. 100/-
4. Annual Intake 20.
5. Annual Output Information not available
6. Distinction awarded with recognition. A certificate is awarded to successful candidates.

Remarks. This institution is under the control of Mysore State Government.

IX—NAVAL ARCHITECTURE.

There is only one institution namely, **College of Engineering (Vzagl). Coconanda, Madras**, offering a course of study in Naval Architecture, as detailed below:—

1. Course of study with duration. . . A 4-year degree course.
2. Minimum Admission qualification. . I.A. with Science
3. Annual Tuition fee Rs. 216/-
4. Annual Intake 105 (including students of other branches of study offered by the institution).
5. Annual Output Newly started. No output as yet.
6. Distinction awarded with recognition. A degree in Naval Architecture will be awarded by the Andhra University to a successful candidate.

Remarks. This institution is started recently by the Madras Government and is earmarked for Naval Architecture training. The institution is still in the formative stage.

X—RADIO ENGINEERING

There is only one institution namely, **Sri Jayachamarajendra Occupational Institute, Bangalore**, offering courses in Radio Engineering. Details are as follows—

Diploma Course

- | | |
|---|--|
| 1. Course of study with duration | A 3-year diploma course. |
| 2. Minimum Admission qualification | S.S.L.C. |
| 3. Annual Tuition fee | Rs. 100. |
| 4. Annual Intake | 15. |
| 5. Annual Output | 10. |
| 6. Distinction awarded with recognition | Diplomas in Radio Engineering and Sound Technology are awarded to all successful candidates. |

Certificate Course

- | | |
|---|--|
| 1. Course of study with duration | A 2-year Certificate course. |
| 2. Minimum Admission qualification | S.S.L.C. |
| 3. Annual Tuition fee | Rs. 100. |
| 4. Annual Intake | 15. |
| 5. Annual Output | No information made available for the Certificate course. |
| 6. Distinction awarded with recognition | Certificates in Radio Engineering and Sound Technology are awarded to all successful candidates. |
| Remarks | This institution is under the control of Mysore State Government. The course offered is a combined course in Radio Engineering and Sound Technology. |

XI—TELE-COMMUNICATION

There is only one institution namely, **College of Engineering, Guindy, Madras**, offering a course in Tele-Communication as detailed below :—

- | | |
|---|--|
| 1. Course of study with duration | A 4-year degree course. |
| 2. Minimum Admission qualification | I.A. with Science. |
| 3. Annual Tuition fee | Rs. 180. |
| 4. Annual Intake | 124 (Sum-total for all branches of study offered by the institution). |
| 5. Annual Output | First output is expected in 1949. |
| 6. Distinction awarded with recognition | A B.E. degree in Tele-communication engineering will be awarded to successful candidates by the Madras University. |
| Remarks | This institution is controlled by Government of Madras and has facilities for researches in all its laboratories. |

XII—METALLURGY

There is only one institution namely, **The Indian Institute of Science, Bangalore**, offering a course in Metallurgy. Details are as follows :—

- | | |
|---|--|
| 1. Course of study with duration | A 3-year diploma course (inclusive of 3 terms of advance studies and research). |
| 2. Minimum Admission qualification | B. Sc. (Hons. I). |
| 3. Annual Tuition fee | Rs. 96. |
| 4. Annual Intake | Still in the formative stage. |
| 5. Annual Output | |
| 6. Distinction awarded with recognition | A diploma will be awarded by the institution to successful candidates. |
| Remarks | This institution is under the supervision of the Government of India. The course is of post-graduate nature. It has got facilities for researches. |

XIII—MINING

There is only one institution namely, **Sri Jayachamarajendra Occupational Institute, Bangalore**, offering a course in Mining as detailed below :—

1. Course of study with duration	A 2-year Certificate course.
2. Minimum Admission qualification	S.S.L.C.
3. Annual Tuition fee	Rs. 50.
4. Annual Intake	30.
5. Annual Output	No information available.
6. Distinction awarded with recognition	A certificate is awarded by the institution to a successful candidate.
Remarks	This institution is controlled by the State Government of Mysore.

XIV—APPLIED PHYSICS

There is only one institution namely, **The Jeypore Vikram Deo College of Science and Technology, Waltair, Madras**, offering courses in Applied Physics, as detailed below :—

1. Course of study with duration	A 3-year degree course.
2. Minimum Admission qualification	I. Sc.
3. Annual Tuition fee	Information not available.
4. Annual Intake	12.
5. Annual Output	12.
6. Distinction awarded with recognition	B. Sc. (Tech.) degree in Applied Physics is awarded to a successful candidate by the Andhra University.
Remarks	This institution is under the control of Andhra University and offers facilities for researches and has also a one-year post-graduate degree course.

XV—CHEMICAL TECHNOLOGY

There are four institutions offering courses in Chemical Technology as detailed below :—

A.—Indian Institute of Science, Bangalore.

1. Course of study with duration	A 2½-year Associateship courses in various branches of Chemistry and Chemical Technology.
2. Minimum Admission qualification	B. Sc. (Hons. I).
3. Annual Tuition fee	Nil.
4. Annual Intake	25.
5. Annual Output	18.
6. Distinction awarded with recognition	An Associateship diploma of the institution is awarded to a successful candidate. The diploma-holders are eligible to use the initials A.I.I.Sc.
Remarks	This institution is supervised by the Government of India and provides facilities for higher researches in Chemistry and in Chemical Technology.

B—Institute of Textile Technology, Trivandrum, Travancore.

1. Course of study with duration	A 4-year diploma course inclusive of one year's Practical Training in Textile Chemistry.
2. Minimum Admission qualification	E.S.L.C.

3. Annual Tuition fee	Rs. 56.
4. Annual Intake	12.
5. Annual Output	6.
6. Distinction awarded with recognition.	A diploma in Textile Chemistry is awarded by Travancore University to a successful candidate.
Remarks	This institution is under the control of Travancore State Government.

C—Jeypore Vikram Deo College of Science and Technology, Waltair, Madras.

Degree Course

1. Course of study with duration	A 3-year degree courses in Foods and Drugs and general Chemical Technology.
2. Minimum Admission qualification	I.Sc.
3. Annual Tuition fee	Rs. 120.
4. Annual Intake	24 (12 in each course).
5. Annual Output	5 in Foods & Drugs and 14 in general Chemical Technology.
6. Distinction awarded with recognition	B. Sc. (Tech.) degree is awarded to successful candidates by the Andhra University.

Post-Graduate Course

1. Course of study with duration.	A 2-year course in Foods and Drugs and General Chemical Technology.
2. Minimum Admission qualification	B. Sc. (Tech.) for post-graduate course.
3. Annual Tuition fee	Rs. 120.
4. Annual Intake	6.
5. Annual Output	4.
6. Distinction awarded with recognition	M. Sc. (Tech.) degree is awarded to successful candidates by the Andhra University.
Remarks	This institution is directly under the control of Andhra University. There is a provision for researches. Ph. D. Degrees are awarded to the successful candidates 3 years after post-graduation.

D—Kerala Polytechnic, Calicut, Madras.

1. Course of study with duration	A 3-year diploma course.
2. Minimum Admission qualification	S.S.L.C.
3. Annual Tuition fee	Rs. 36.
4. Annual Intake	20.
5. Annual Output	Newly started.
6. Distinction awarded with recognition	A diploma will be awarded to a successful candidate by the Director of Industries, Government of Madras.
Remarks	This is one of the six Polytechnics started by Madras Government in 1947. The institution is still in the formative stage.

XVI—CINEMATOGRAPHY AND SOUND TECHNOLOGY

There are two institutions offering courses in Cinematography and sound technology as detailed below:—

A—Government School of Technology, Broadway, Madras

1. Course of study with duration	A 4-year diploma course in Cinematography.
2. Minimum Admission qualification.	I.Sc.

3. Annual Tuition fee	Rs. 100.
4. Annual Intake	13.
5. Annual Output	Newly started. No output as yet.
6. Distinction awarded with recognition	A diploma will be awarded to successful candidates by the Director of Industries, Government of Madras.
Remarks	This institution is under the control of the Director of Industries, Madras Government.

B—Sri Jayachamarajendra Occupational Institute, Bangalore

Diploma Course

1. Course of study with duration	A 3-year diploma course in Motion Picture Technique & Sound recording.
2. Minimum Admission qualification	S.S.L.C.
3. Annual Tuition fee	Rs. 100.
4. Annual Intake	30.
5. Annual Output	No information available.
6. Distinction awarded with recognition.	Diplomas are awarded to successful candidates.

Certificate Course

1. Course of study with duration.	A 2-year Certificate Course in the Motion Picture Technique & Sound Recording.
2. Minimum Admission qualification.	S.S.L.C.
3. Annual Tuition fee	Rs. 50,
4. Annual Intake	7.
5. Annual Output	No information available.
6. Distinction awarded with recognition.	Certificates are awarded to successful candidates of respective courses.
Remarks.	This institution is under the control of Mysore Government.

XVII—FISHERIES TECHNOLOGY & NAVIGATION

There are three Institutions offering courses in fisheries Technology & Navigation as detailed below:—

A—Andhra Polytechnic, Coconada

1. Course of study with duration	A 3-year diploma course.
2. Minimum Admission qualification	S.S.L.C.
3. Annual Tuition fee	Rs. 36.
4. Annual Intake	20.
5. Annual Output	Newly started.
6. Distinction awarded with recognition	A diploma in Fisheries Technology and Navigation will be awarded to successful candidates.
Remarks	This is one of the six Polytechnics newly started in 1946 by Madras Government and still in the formative stage.

B—Central Polytechnic, Madras.

1. Course of study with duration.	A 3-year diploma course.
2. Minimum Admission qualification.	S.S.L.C.
3. Annual Tuition fee	Rs. 36.
4. Annual Intake	20.
5. Annual Output	Newly started.
6. Distinction awarded with recognition.	A diploma in Fisheries Technology and Navigation will be awarded to successful candidates.
Remarks	This institution which is under the control of the Government of Madras, has been recently started along with five other Polytechnics.

C—Government School of Technology, Broadway, Madras

1. Course of study with duration	. A 4-year diploma course in Fisheries Technology and Navigation.
2. Minimum Admission qualification	. S.S.L.C.
3. Annual Tuition fee . . . . .	. Rs. 36.
4. Annual Intake . . . . .	. 103 (including students of other courses of studies).
5. Annual Output . . . . .	. Started only in 1946.
6. Distinction awarded with recognition.	. A diploma will be awarded to successful candidates.
Remarks . . . . .	. This institution is under the control of the Government of Madras.

XVIII—GEOLOGY

There is only one institution namely, **Erskine College of Natural Science, Waltair, Madras**, offering a course of study in Geology as detailed below :—

Degree Course

1. Course of study with duration	. A 2-year degree course and a 3-year Honours' degree course.
2. Minimum Admission qualification	. I.Sc.
3. Annual Tuition fee . . . . .	. No information available.
4. Annual Intake . . . . .	. 18 in degree course & 8 in Hons. degree course.
5. Annual Output . . . . .	. 20 in degree course.
6. Distinction awarded with recognition	. B. Sc. (Hons) and B. Sc. degrees are awarded to successful candidates of respective degree courses by the Andhra University.

Post-Graduate Degree Course

1. Course of study with duration	. A 2-year course. Duration is one year for Hons. degree holders.
2. Minimum Admission qualification	. B. Sc.
3. Annual Tuition fee . . . . .	. No information available.
4. Annual Intake . . . . .	. 6.
5. Annual Output . . . . .	. Nil.
6. Distinction awarded with recognition.	. M. Sc. degree is awarded to successful candidates by the Andhra University.

Research Degree Course

1. Course of study with duration	. A 3-year course (Ph. D.)
2. Minimum Admission qualification	. M. Sc.
3. Annual Tuition fee . . . . .	. No information available.
4. Annual Intake . . . . .	. 6.
5. Annual Output . . . . .	. Nil.
6. Distinction awarded with recognition.	. Ph. D. degree is awarded to a successful candidate by the Andhra University.
Remarks . . . . .	. This institution is controlled by the Andhra University and provides facilities for higher researches in Geology. D. Sc. degrees are also awarded to successful candidates.

XIX —LEATHER TECHNOLOGY

There are two institutions offering courses of study in Leather Technology as detailed below:—

A.—Alagappa Chettiar College of Technology, Guindy, Madras.

- | | |
|---|---|
| 1. Course of study with duration. | A 2½ year degree course inclusive of 6 months of practical training. |
| 2. Minimum Admission qualification | B. Sc. |
| 3. Annual Tuition fee | Rs. 200. |
| 4. Annual Intake | 6. |
| 5. Annual Output | Information not available. |
| 6. Distinction awarded with recognition | B. Sc. (Tech) degree in Leather Technology is awarded to successful candidates by the Madras University. |
| Remarks. | This institution is controlled by the Madras University and provides facilities for researches in the above technology. |

B.—Institute of Leather Technology, Washermanpet, Madras.

Diploma Course

- | | |
|--|---|
| 1. Course of study with duration. | A 4-year diploma course. |
| 2. Minimum Admission qualification. | S.S.L.C. |
| 3. Annual Tuition fee | Rs. 24. |
| 4. Annual Intake | 12. |
| 5. Annual Output | The course has been newly started. |
| 6. Distinction awarded with recognition. | Diplomas will be awarded to successful candidates by the Madras Government. |

Certificate Course.

- | | |
|--|---|
| 1. Course of study with duration. | A 3-year Course. |
| 2. Minimum Admission qualification. | Vth standard of High School. |
| 3. Annual Tuition fee | Rs. 12. |
| 4. Annual Intake | 8. |
| 5. Annual Output | The course has been newly started. |
| 6. Distinction awarded with recognition. | Certificates will be awarded to successful candidates by the Madras Government. |
| Remarks. | This institution is controlled by Madras Government and has facilities for researches. A separate section is maintained for this purpose. |

XX—PRINTING TECHNOLOGY

There are three institutions offering courses of study in printing technology as detailed below:

A.—Central Polytechnic, Madras

- | | |
|--|---|
| 1. Course of study with duration. | A 3-year diploma course. |
| 2. Minimum Admission qualification | S.S.L.C. |
| 3. Annual Tuition fee | Rs. 36. |
| 4. Annual Intake | 20. |
| 5. Annual Output | Newly started. |
| 6. Distinction awarded with recognition. | A diploma will be awarded to successful candidates. |
| Remarks. | This is one of the six Polytechnics started in 1946 by the Madras Government. This institution is still in the formative stage. |

B.—Government School of Technology, Broadway, Madras.

Diploma Course

1. Course of study with duration . . . A 4-year diploma course.
2. Minimum Admission qualification . . . S.S.L.C.
3. Annual Tuition fee . . . Rs. 36;
4. Annual Intake . . . 103 (this includes students of other branches of studies offered by the institution)
Full time course is only started in 1946.
5. Annual Output . . . A diploma L.P.T. is awarded to successful candidates by the Madras Government.
6. Distinction awarded with recognition . . .

Part-Time Diploma Course

1. Course of study with duration. . . A 5-year part-time diploma course.
 2. Minimum Admission qualification . . . S.S.L.C.
 3. Annual Tuition fee . . . Rs. 12.
 4. Annual Intake . . . 22.
 5. Annual Output . . . 5.
 6. Distinction awarded with recognition . . . A diploma L.P.T. is awarded to successful candidates by the Madras Government.
- Remarks . . . This institution is controlled by the Director of Industries, Madras Government.

C.—Sri Jayachamarajendra Occupational Institute, Bangalore.

Diploma Course

1. Course of study with duration . . . A 3-year diploma course.
2. Minimum Admission qualification . . . S.S.L.C.
3. Annual Tuition fee . . . Rs. 100.
4. Annual Intake . . . 10.
5. Annual Output . . . Information not available.
6. Distinction awarded with recognition. . . Diplomas in Printing Technology are awarded to successful candidates.

Certificate Course

1. Course of study with duration . . . A 2-year Certificate course.
 2. Minimum Admission qualification . . . S.S.L.C.
 3. Annual Tuition fee . . . Rs. 50.
 4. Annual Intake . . . 10.
 5. Annual Output . . . Information not available.
 6. Distinction awarded with recognition . . . Certificates in Printing Technology are awarded to successful candidates.
- Remarks . . . This institution is under the control of Mysore State Government.

XXI—TEXTILE TECHNOLOGY

There are five Institutions offering courses of Study in Textile Technology, as detailed below :—

A.—Alagappa Chettiar College of Technology, Guindy, Madras.

1. Course of study with duration. . . A 2½-year degree course, inclusive of 6 months of practical training.
 2. Minimum Admission qualification . . . B. Sc.
 3. Annual Tuition fee . . . Rs. 200
 4. Annual Intake . . . 6.
 5. Annual Output . . . Information not available.
 6. Distinction awarded with recognition. . . B. Sc. (Tech.) in Textile Technology is awarded to a successful candidate by Madras University.
- Remarks . . . This institution is under the control of Madras University.

B.—Arthur Hope College of Technology, Coimbatore, Madras

1. Course of study with duration. . . A 4-year degree course.
2. Minimum Admission qualification . . I.A. with science.
3. Annual Tuition fee . . . Rs. 180.
4. Annual Intake . . . 96 (inclusive of students in other branches of studies, offered by the institute).
5. Annual Output . . . Started in 1945.
6. Distinction awarded with recognition. A B.Sc. (Tech) degree will be awarded by the Madras University to successful candidates.
- Remarks. . . This institution is under the control of the Government of Madras.

C.—Government Textile Institute, Washermanpet, Madras.

- Remarks . . . This is a Madras Government institution but no information made available for reply to the questionnaire.

D.—Institute of Textile Technology, Travancore.

1. Course of study with duration. . . A 4-year diploma course inclusive of one year of practical training.
2. Minimum Admission qualification . . E. S. L.C.
3. Annual Tuition fee . . . Rs. 56.
4. Annual Intake . . . 12.
5. Annual Output . . . 12.
6. Distinction awarded with recognition A diploma in Textile Technology is awarded to the successful candidates.
- Remarks. . . This institution is under the control of Travancore State Government.

E.—Sri Krishnarajendra Silver Jubilee Technological Institute, Fargalcre.

Degree

1. Course of study with duration . . A 3½-year degree course inclusive of 6 months of practical training.
2. Minimum Admission qualification . . I. Sc.
3. Annual Tuition fee . . Rs. 50 for Mysorian and Rs. 100 for Non-Mysorian.
4. Annual Intake . . . 15.
5. Annual Output . . . Newly started.
6. Distinction awarded with recognition. A degree in Textile Technology of Mysore University will be awarded to successful candidates.

Diploma

1. Course of study with duration . . A 2½year diploma course with 6 months of practical training.
2. Minimum Admission qualification . . E. S. L.C.
3. Annual Tuition fee. . . Nil for Mysorian. Rs. 50 for Non-Mysorian.
4. Annual Intake . . . 11.
5. Annual Output . . . 8.
6. Distinction awarded with recognition A diploma in Textile Technology is awarded to successful candidates.
- Remarks. . . This institution is under the control of Mysore Government.

XXII—ARTS

There are three institutions offering various courses in Art, as detailed below:-

A.—Central School of Arts and Crafts, Hyderguda, Hyderabad (Deccan).

- | | |
|---|---|
| 1. Course of study with duration | . A 5-year diploma course in Painting and Sculpturing, etc. |
| 2. Minimum Admission qualification | . VIIIth standard with inter-drawing Examination Certificate. |
| 3. Annual Tuition fee | . Rs. 42. |
| 4. Annual Intake | . 10 in each course. |
| 5. Annual Output | . 10 in each course. |
| 6. Distinction awarded with recognition | . A diploma is awarded to successful candidates. |
| Remarks. | . This institution is under the control of H.E.H. the Nizam's Government. |

B.—H .H. The Maharaja School of Arts, Trivandrum, Travancore.

- | | |
|---|---|
| 1. Course of study with duration | . A 4-year certificate course in Drawing Painting and Clay Modelling. |
| 2. Minimum Admission qualification | . VIIth standard of High School. |
| 3. Annual Tuition fee | . Rs. 20 for Drawing & Painting.
Rs. 12 for Clay Modelling. |
| 4. Annual Intake | . 14 in Drawing & Painting.
4 in Clay Modelling. |
| 5. Annual Output | . 19 in Drawing & Painting.
3 in Clay Modelling. |
| 6. Distinction awarded with recognition | . A Certificate in each course is awarded to successful candidates. |
| Remarks. | . This institution is controlled by the State Government of Travancore. |

C.—School of Arts and Crafts, Poonamalli High Road, Park Town, Madras.

- | | |
|---|--|
| 1. Course of study with duration. | . A 3-year certificate course in Painting and Modelling. |
| 2. Minimum Admission qualification | . IVth form of High School. |
| 3. Annual Tuition fee | . Rs. 12. |
| 4. Annual Intake | . 25. |
| 5. Annual Output | . Information not available. |
| 6. Distinction awarded with recognition | . A certificate is awarded to successful candidates. |
| Remarks. | . This institution is under the control of the Government of Madras. There are provisions for other courses of Artizan standard in Crafts Section. |

XXIII—COMMERCE

There are three institutions in this region offering courses of study in commerce as detailed below:—

A.—Central School of Commerce, Saifabad, Hyderabad (Deccan).

- | | |
|--|--|
| 1. Course of study with duration | . A 2-year diploma course. |
| 2. Minimum Admission qualification | . S.S.L.C. |
| 3. Annual Tuition fee | . Rs. 60. |
| 4. Annual Intake | . 28. |
| 5. Annual Output | . 5. |
| 6. Distinction awarded with recognition. | . A diploma in commerce is awarded to a successful candidate. |
| Remarks. | . This institution is controlled by H.E.H. the Nizam's Government. |

B.—Central College, Bangalore

- | | |
|---|---|
| 1. Course of study with duration. | A 4-year degree course. |
| 2. Minimum Admission qualification. | S.S.L.C. |
| 3. Annual Tuition fee | Rs. 96. |
| 4. Annual Intake | 143. |
| 5. Annual Output | Information not available. |
| 6. Distinction awarded with recognition | A degree (B. Com) is awarded to the successful candidates by the Mysore University. |
| Remarks. | This institution is under the control of Mysore State Government. |

C.—Sanatan Dharma College, Alleppey, Travancore.

- | | |
|---|---|
| 1. Course of study with duration | A diploma course of 4 years duration inclusive of one year of practical training. |
| 2. Minimum Admission qualification | S.S.L.C. |
| 3. Annual Tuition fee | Rs. 80. |
| 4. Annual Intake | 101. |
| 5. Annual Output | Newly started. |
| 6. Distinction awarded with recognition | A diploma will be awarded to a successful candidate. |
| Remarks | This institution is a private institution controlled by a Board of Trustees. |

CHAPTER IV**REGIONAL FACILITIES.****EASTERN REGION**

Altogether sixteen institutions from this region imparting training in Engineering, Technological subjects, Art and Commerce, have furnished the requisite information in reply to the questionnaire (Appendix 'A'), a list of which has already been given in Chapter I.

Of these sixteen institutions, four are non-residential—viz :—

1. Departments of Applied Chemistry and Applied Physics, University College of Science, Calcutta (E-1).
2. Calcutta Technical School, Calcutta (E-8).
3. Government School of Arts, Calcutta (E-12).
4. Government Commercial Institute, 5 Clive Street, Calcutta (E-16).

Nine institutions as given below are partly residential :—

1. College of Engineering and Technology, P. O. Jadavpur College, Calcutta (E-4).
2. Bihar College of Engineering, Patna, Bihar (E-3).
3. Orissa School of Engineering, Cuttack, Orissa (E-11).
4. Bengal Textile Institute, Serampore, Hoogly, West Bengal (E-6).
5. Bengal Silk Technological Institute, Berhampore, West Bengal (E-7).
6. Calcutta Engineering College, Jamir Lane, Calcutta (E-9).
7. Harprasad Das Jain College, Arrah, Bihar (E-13).
8. Rajendra College Chapra, Saran, Bihar (E-14).
9. Sambalpur College, Sambalpur, Orissa (E-15).

The remaining three institutions, given below, are residential:—

1. Bengal Engineering College, Howrah, West Bengal, (E-2).
2. Indian School of Mines, Dhanbad, Bihar (E-5).
3. Kanchrapara Technical School, Kanchrapara, West Bengal (E-10).

Table IV in Chapter I shows that facilities for training in thirteen different branches of study, covering engineering and other technological subjects, are available in the above institutions. Subjects in which the training facilities are available are as follows :—

I.—CHEMICAL ENGINEERING.

The only institution offering a course in Chemical Engineering is the College of Engineering and Technology, Jadavpur, Calcutta.

Details regarding the course is as follows :—

1. Course of study with duration	A 4-year Degree course inclusive of 3 months of practical training.
2. Minimum Admission qualification	Intermediate in Science.
3. Annual Tuition fee	Rs. 180.
4. Annual Intake	70.
5. Annual Output	16.
6. Distinction awarded with recognition	B. Ch. E. degree is awarded to the successful candidates by the National Council of Education (Bengal). The degree is recognised by the Governments of India, West Bengal and by the Institution of Engineers (India) as equivalent to a degree of any Indian University.
Remarks.	This is a private institution aided by the Provincial Government. There exists facilities for researches in Chemical Engineering and Chemical Technology leading to D. Sc. and D. Phil. degrees of Calcutta University.

II.—CIVIL ENGINEERING

There are six institutions offering various courses in Civil Engineering.

Details of the courses are as follows :—

A.—Bengal Engineering College, Howrah, West Bengal.

1. Course of study with duration	A 4-year degree course.
2. Minimum Admission qualification	Intermediate Science.
3. Annual Tuition fee	Rs. 160 for 1st and 2nd years. Rs. 180 for 3rd and 4th years.
4. Annual Intake	72.
5. Annual Output	41.
6. Distinction awarded with recognition	B. E. in Civil Engineering is awarded by Calcutta University to successful candidates.
Remarks	This is a Provincial Government Institution.

B.—College of Engineering and Technology, Jadavpur, Calcutta.

1. Course of study with duration	A 3-year Diploma course in Civil Engineering (Overseer's course).
2. Minimum Admission qualification	Matriculation.
3. Annual Tuition fee	Rs. 120.
4. Annual Intake	29.
5. Annual Output	4.

6. Distinction awarded with recognition . A diploma is awarded by the National Council of Education, West Bengal.
 Remarks This is a private institution aided by the Provincial Government.

C.—Calcutta Technical School, Calcutta.

1. Course of study with duration . . . A 4-year diploma course in Plumbing and Sanitary Engineering.
 2. Minimum Admission qualification . Matriculation or Junior Cambridge.
 3. Annual Tuition Fee . . . Rs. 96.
 4. Annual Intake 20 (maximum) (4 in 1946-47)
 5. Annual Output 38 (with students of other subjects). This is the total output of all existing Diploma courses.
 6. Distinction awarded with recognition . A diploma is awarded.
 Remarks This is controlled by West Bengal Government. The course is meant for bonafide apprentices of recognised workshops in and around Calcutta.

D.—Calcutta Engineering College, Jamir Lane, Ballygunge, Calcutta.

Diploma Course

1. Course of study with duration . . . A 3-year diploma course.
 2. Minimum Admission qualification . Matriculation.
 3. Annual Tuition fee Rs. 180.
 4. Annual Intake 40.
 5. Annual Output 18.
 6. Distinction awarded with recognition . A diploma is awarded by the Institution.

Certificate Course

1. Course of study with duration . . . A 3-year Certificate course.
 2. Minimum Admission qualification . Xth standard.
 3. Annual Tuition fee Rs. 72.
 4. Annual Intake 12.
 5. Annual Output 5.
 6. Distinction awarded with recognition . A certificate is awarded by the Institution.
 Remarks This is a private institution aided by the Calcutta Corporation.

E.—Bihar College of Engineering, Patna.

Degree Course

1. Course of study with duration . . . A 5-year degree course (inclusive of one year's practical training).
 2. Minimum Admission qualification . I. Sc.
 3. Annual Tuition fee Rs. 96.
 4. Annual Intake 71 (inclusive of Electrical student in degree course).
 5. Annual Output 18.
 6. Distinction awarded with recognition . B. Sc. (Eng.) in Civil Engineering awarded by the Patna University.

Diploma Course

1. Course of study with duration . . . A 4-year Diploma course (including one year of practical training).
 2. Minimum Admission qualification . Matriculation.
 3. Annual Tuition fee Rs. 36.
 4. Annual Intake 122.
 5. Annual Output 23.

6. Distinction awarded with recognition . A diploma is issued by the Director of Industries, Bihar, to the candidates, who successfully complete the diploma course, and these candidates are eligible for the Subordinate Engineering services in the province.

Remarks This institution is controlled by Bihar Government.

F.—Orissa School of Engineering, Cuttack, Orissa.

1. Course of study with duration . . . A 4-year diploma course (including one year's of practical training).
2. Minimum Admission qualification . . Matriculation.
3. Annual Tuition fee Rs. 36.
4. Annual Intake 40.
5. Annual Output 15.
6. Distinction awarded with recognition

A Subordinate Civil Engineer's diploma is awarded to a candidate who successfully completes his course. This diploma is recognised by the Provincial Government for subordinate Engineer's job.

Remarks This institution is controlled by the Government of Orissa.

III. ELECTRICAL ENGINEERING.

There are four institutions offering courses in Electrical Engineering. The details of the institutions, courses etc. are as follows :—

A.—Bengal Engineering College, Howrah, West Bengal.

1. Course of study with duration . . . A 4-year Degree course.
2. Minimum Admission qualification . . I. Sc.
3. Annual Tuition fee Rs. 160 for 1st and 2nd years.
Rs. 200 for 3rd and 4th years.
4. Annual Intake 26.
5. Annual Output 8.
6. Distinction awarded with recognition . . B. E. degree in Electrical Engineering is awarded by Calcutta University to successful candidates.

Remarks This institution is controlled by the West Bengal Government.

B.—College of Engineering and Technology, Jadavpur, Calcutta.

1. Course of study with duration . . . A 4-year Degree course including 3 months of practical training.
2. Minimum Admission qualification . . I. Sc.
3. Annual Tuition fee Rs. 180.
4. Annual Intake 60.
5. Annual Output 24.
6. Distinction awarded with recognition . . B. E. E. degree is awarded by the National Council of Education, West Bengal. The degree is recognised by the Central Government, the Provincial Government and the Institution of Engineers (India).

Remarks This is a private institution aided by the Government of West Bengal. Researches in small Motor manufacturing is carried on in collaboration with local manufacturers.

C.—Calcutta Technical School, Calcutta.

1. Course of study with duration . . . A 5-year Diploma course.
2. Minimum Admission qualification . . Matriculation.
3. Annual Tuition fee Rs. 96.
4. Annual Intake Information not available.
5. Annual Output Information not available.

6. Distinction awarded with recognition . A diploma is awarded to the successful candidate, by the Board of Apprenticeship Training, Bengal.
- Remarks This is a Provincial Government institution. The course is meant for *bonafide* apprentices of suitable factories in and around Calcutta.

D.—Bihar College of Engineering, Patna, Bihar.

1. Course of study with duration . . . A 5-year Degree course inclusive of one year's practical training.
2. Minimum Admission qualification . I. Sc.
3. Annual Tuition fee . . . Rs. 96.
4. Annual Intake . . . 71 (along with Civil Engineering students).
5. Annual Output . . . 18 (along with Civil Engineering students).
6. Distinction awarded with recognition . B. Sc. (Eng.) Degree is awarded by the Patna University to successful candidates.
- Remarks This is a Provincial Government institution.

IV. ELECTRICAL & MECHANICAL ENGINEERING (COMBINED.)

There are two institutions offering training facilities in Electrical and Mechanical Engineering combined courses. Details are as follows:—

A.—Calcutta Engineering College, Jamir Lane, Calcutta.

Diploma Course.

1. Course of study with duration . . . A 3-year Diploma course.
2. Minimum Admission qualification . Matriculation.
3. Annual Tuition fee . . . Rs. 180.
4. Annual Intake . . . 90.
5. Annual Output . . . 22.
6. Distinction awarded with recognition . Diploma is awarded to successful candidates by the College.

Certificate Course.

1. Course of study with duration . . . A 2-year Certificate Course.
2. Minimum Admission qualification . Xth standard.
3. Annual Tuition fee . . . Rs. 60 to Rs. 180.
4. Annual Intake . . . 38.
5. Annual Output . . . 74 (in 1946).
6. Distinction awarded with recognition . A certificate is awarded to successful candidates by the college.
- Remarks This is a private institution aided by the Calcutta Corporation.

B.—Kanchrapara Technical School, Kanchrapara, West Bengal.

1. Course of study with duration . . . A 5-year Certificate course.
2. Minimum Admission qualification . Matriculation or Junior Cambridge.
3. Annual Tuition fee . . . Nil.
4. Annual Intake . . . 16.
5. Annual Output . . . 5.
6. Distinction awarded with recognition . A certificate is awarded to successful candidates.
- Remarks This institution is now partially controlled by the West Bengal Government and partially by the East Indian Railway. The course is meant for Railway apprentices.

V. MECHANICAL ENGINEERING

There are three institutions offering facilities for training in Mechanical Engineering. Details are as follows :—

A.—College of Engineering and Technology, Jadavpur, Calcutta.

Degree Course.

- | | |
|---|---|
| 1. Course of study with duration | A 4-year Degree course. |
| 2. Minimum Admission qualification | I. Sc. |
| 3. Annual Tuition fee | Rs. 180. |
| 4. Annual Intake | 160. |
| 5. Annual Output | 59. |
| 6. Distinction awarded with recognition | B. M. E. degree is awarded by the National Council of Education, West Bengal to a candidate who completes the degree course successfully. Degree awarded is recognised by the Institution of Engineers etc. as equivalent to a degree awarded by any recognised University. |

Diploma Course.

- | | |
|---|--|
| 1. Course of study with duration | A 3-year diploma course. |
| 2. Minimum Admission qualification | Matriculation. |
| 3. Annual Tuition fee | Rs. 120. |
| 4. Annual Intake | No information available. |
| 5. Annual Output | 75. |
| 6. Distinction awarded with recognition | A diploma is awarded to a candidate who successfully completes the course. |

Remarks This is a private institution aided by the Government of West Bengal. There are facilities for research in Refrigeration Engineering.

B.—Bengal Engineering College Howrah, West Bengal.

- | | |
|---|--|
| 1. Course of study with duration | A 4-year Degree course. |
| 2. Minimum Admission qualification | I. Sc. |
| 3. Annual Tuition fee | Rs. 160 for 1st and 2nd years.
Rs. 200 for 3rd and 4th years. |
| 4. Annual Intake | 28. |
| 5. Annual Output | 12. |
| 6. Distinction awarded with recognition | B. E. degree in Mechanical Engineering is awarded by the Calcutta University to successful candidates. |

Remarks This is a West Bengal Government Institution.

C.—Calcutta Technical School, Calcutta.

- | | |
|---|--|
| 1. Course of study with duration | A 5-year Certificate course in Mechanical Engineering. |
| 2. Minimum Admission qualification | Matriculation or Junior Cambridge. |
| 3. Annual Tuition fee | Rs. 96. |
| 4. Annual Intake | 159. |
| 5. Annual Output | 38 (including students of other courses offered by the institution.) |
| 6. Distinction awarded with recognition | Diploma is awarded to a successful candidate by the Board of Apprentice Training, West Bengal. |

Remarks This is a West Bengal Government institution and meant for *bonafide* apprentices of suitable factories in and around Calcutta.

VI. MINING.

There is **only** one institution namely, **Indian School of Mines, Dhanbad, Bihar** offering facilities for training in Mining. Details are as follows :—

Associateship Course.

- | | |
|---|---|
| 1. Course of study with duration | A 5-year associateship course (practically of one year's duration after the Certificate course is completed.) |
| 2. Minimum Admission qualification | I. Sc. |
| 3. Annual Tuition fee | Rs. 220 for 1st and 2nd years.
Rs. 180 for 3rd and 4th years. |
| 4. Annual Intake | 24 (in all.) |
| 5. Annual Output | 18. |
| 6. Distinction awarded with recognition | Diploma is awarded to successful candidates. Associates of the institute are entitled to use A. I. S. M. |

Certificate Course.

- | | |
|---|---|
| 1. Course of study with duration | A 4-year Certificate course. |
| 2. Minimum Admission qualification | I. Sc. |
| 3. Annual Tuition fee | Rs. 220 for 1st and 2nd years.
Rs. 180 for 3rd and 4th years. |
| 4. Annual Intake | 24 (in all.) |
| 5. Annual Output | 20. |
| 6. Distinction awarded with recognition | Certificate is awarded to successful candidates. |
| Remarks | This institution is directly under the Government of India, Ministry of Works, Mines and Power. |

VII. METALLURGY.

Only one institution in this region namely, **Bengal Engineering College, Howrah, West Bengal**, offers facilities for training in Metallurgy. Details are as follows :—

- | | |
|---|---|
| 1. Course of study with duration | A 4-year Degree course. |
| 2. Minimum Admission qualification | I. Sc. |
| 3. Annual Tuition fee | Rs. 160 for 1st and 2nd years.
Rs. 200 for 3rd and 4th years. |
| 4. Annual Intake | 6. |
| 5. Annual Output | 15 (1946). |
| 6. Distinction awarded with recognition | B. E. (Met.) Degree is awarded by the Calcutta University to successful candidates. |
| Remarks | This is a West Bengal Government institution. |

VIII. APPLIED PHYSICS.

Only one institution in this region namely, **The Department of Applied Physics, University College of Science & Technology, Calcutta University, Calcutta**, offers facilities for training in Applied Physics. Details are as follows :—

- | | |
|--|--|
| 1. Course of study with duration | A Post-Graduate degree course in Applied Physics of 2 years' duration. |
| 2. Minimum Admission qualification | B. Sc. |
| 3. Annual Tuition fee | Rs. 180 (Approximately). |
| 4. Annual Intake | 20. |
| 5. Annual Output | 18. |

6. Distinction awarded with recognition . M. Sc. in Applied Physics is awarded to successful candidates by the Calcutta University.
- Remarks This is under the control of the Calcutta University. Researches in various branches of Applied Physics are carried on and Research degrees viz., D. Phil. and D. Sc., are awarded to successful candidates.

IX. CHEMICAL TECHNOLOGY.

Only one institution in this region namely, the **Department of Applied Chemistry, University College of Science & Technology, Calcutta University, Calcutta**, offers facilities for training in Chemical Technology. Details are as follows :—

Post-Graduate Degree Course.

1. Course of study with duration . . . A 2-year course in Applied Chemistry.
2. Minimum Admission qualification . . B. Sc. with Chemistry as one of the subjects.
3. Annual Tuition fee . . . Rs. 180.
4. Annual Intake . . . 18.
5. Annual Output . . . 18.
6. Distinction awarded with recognition . M. Sc. degree in Applied Chemistry is awarded by the Calcutta University.

Diploma Course.

1. Course of study with duration . . . A 1-year diploma course in Soap Technology.
2. Minimum Admission qualification . . B. Sc. with Chemistry as one of the subjects.
3. Annual Tuition fee . . . Rs. 300.
4. Annual Intake . . . 10.
5. Annual Output . . . Diploma course is recently started.
6. Distinction awarded with recognition . A diploma in Soap technology is awarded by the Calcutta University to successful candidates.

- Remarks This is directly under the control of the Calcutta University. Researches in various branches of Applied Chemistry are carried on and research degrees viz. D. Phil., and D. Sc. Degrees are awarded to successful candidates.

X. GEOLOGY.

Only one institution in this region namely, the **Indian School of Mines, Dhanbad, Bihar**, offers courses in Geology. Details are as follows :—

Associateship Course

1. Course of study with duration . . . A 5-year Associateship course (Practically of one year's duration after the certificate course is completed.)
2. Minimum Admission qualification . . I. Sc.
3. Annual Tuition fee . . . Rs. 220 for 1st and 2nd years.
Rs. 180 for 3rd and 4th years.
4. Annual Intake . . . 24 (including students of Mining course).
5. Annual Output . . . 1.
6. Distinction awarded with recognition . Associateship diploma is awarded to successful candidates. Associates can use the initials A. I. S. M.

Certificate Course.

1. Course of study with duration	A 4-year Certificate course in Geology.
2. Minimum Admission qualification	I. Sc.
3. Annual Tuition fee	Rs. 220 for 1st and 2nd years. Rs. 180 for 3rd and 4th years.
4. Annual Intake	24 (inclusive of students of Mining course).
5. Annual Output	1.
6. Distinction awarded with recognition	A certificate is awarded to successful candidates by the institution.
Remarks	This institution is directly under the control of Central Government, Ministry of Works, Mines and Power.

XI. TEXTILE TECHNOLOGY.

There are two institutions offering courses in Textile Technology and allied subjects. Details are as follows :—

A.—Bengal Textile Institute, Serampur, Hoogly, West Bengal.

1. Course of study with duration	A 3-year diploma course.
2. Minimum Admission qualification	Matriculation or equivalent.
3. Annual Tuition fee	Nil.
4. Annual Intake	40 to 50.
5. Annual Output	19.
6. Distinction awarded with recognition	Diplomas are awarded by the Director of Industries, West Bengal.
Remarks	This institution is under the control of the Director of Industries, Government of West Bengal, and generally meant for <i>bonafide</i> residents of West Bengal.

B.—Bengal Silk Technological Institute, Behrampore, West Bengal.

1. Course of study with duration	A 4-year Diploma course in Silk Technology.
2. Minimum Admission qualification	Matriculation.
3. Annual Tuition fee	Nil for Bengalee students and Rs. 360 for non-Bengalee.
4. Annual Intake	19.
5. Annual Output	9.
6. Distinction awarded with recognition	Diplomas are awarded to successful candidates. Diploma holders can use the initials L. T. T.
Remarks	This is the only silk technological institution in India. The institution is under the control of the West Bengal Government

XII. ART

There is only one institution in this region namely, **Government school of Arts, Calcutta**, offering courses in various branches of Arts. Details are as follows :—

1. Course of study with duration	Certificate courses in various branches of Arts—each of five years' duration.
2. Minimum Admission qualification	Matriculation.
3. Annual Tuition fee	Rs. 36 for elementary classes. Rs. 60 for advanced classes.
4. Annual Intake	50 in different branches.
5. Annual Output	16 in different branches.
6. Distinction awarded with recognition	Certificates are awarded by the West Bengal Government to candidates who successfully complete their courses.
Remarks	This institution is under the control of the West Bengal Government.

XIII. COMMERCE.

There are four institutions offering various courses in Commerce. Details are as follows :—

A.—Government Commercial Institute, Clive Street, Calcutta.

1. Course of study with duration .	A 2-year Diploma course.
2. Minimum Admission qualification .	Matriculation.
3. Annual Tuition fee	Rs. 68.
4. Annual Intake	97.
5. Annual Output	118 (in 1946).
6. Distinction awarded with recognition .	Diplomas are awarded to candidates who successfully complete their course. This diploma is recognised by the Calcutta and Allahabad Universities as equivalent to I. Com. and diploma holders are admitted to the degree courses of these universities.
Remarks	This institution is controlled by the West Bengal Government.

B.—Har Prasad Das Jain College, Arrah, Bihar.

Diploma Course

1. Course of study with duration .	A 2-year Diploma course.
2. Minimum Admission qualification .	Matriculation.
3. Annual Tuition fee	Rs. 90.
4. Annual Intake	202.
5. Annual Output	75.
6. Distinction awarded with recognition .	I. Com. diplomas are awarded by the Patna University to successful candidates.

Degree Course.

1. Course of study with duration .	A 2-year Degree course.
2. Minimum Admission qualification .	I. Com.
3. Annual Tuition fee	Rs. 102.
4. Annual Intake	75.
5. Annual Output	14.
6. Distinction awarded with recognition .	B. Com. degree is awarded by the Patna University to successful candidates.
Remarks	This institution is affiliated to the Patna University.

C.—Rajendra College, Chapra, Bihar.

Diploma course.

1. Course of study with duration .	A 2-year Diploma course.
2. Minimum Admission qualification .	Matriculation.
3. Annual Tuition fee	Rs. 81.
4. Annual Intake	150.
5. Annual Output	103.
6. Distinction awarded with recognition .	I. Com. diploma is awarded by the Patna University to successful candidates.

Degree Course.

1. Course of study with duration .	A 2-year Degree course.
2. Minimum Admission qualification .	I. Com.
3. Annual Tuition fee	Rs. 93.
4. Annual Intake	67.
5. Annual Output	37.
6. Distinction awarded with recognition .	B. Com. degree is awarded by the Patna University to successful candidates.
Remarks	This institution is controlled by the Bihar Government.

D.—Sambalpur College, Sambalpur, Orissa.

1. Course of study with duration	A 4-year Degree course.
2. Minimum Admission qualification	Matriculation.
3. Annual Tuition fee	Rs. 84.
4. Annual Intake	32.
5. Annual Output	Newly started.
6. Distinction awarded with recognition	B. Com. degree will be awarded by the Utkal University to successful candidates.
Remarks	This institution is under the control of Orissa Government.

CHAPTER—V.

REGIONAL FACILITIES.

WESTERN REGION.

Twenty-two institutions of this region have supplied the requisite information in reply to the questionnaire (Appendix A) circulated to them and the list thereof has already been given in chapter I.

Two institutions of this region, *viz.* Government Leather Working School, Bombay (W-8) and Morvi Technical Institute, Morvi, Kathiawar (W-12) are residential institutions. But no information was made available with regard to Govindram Saxeria College of Commerce, Nagpur (W-21). The rest are either non-residential or partly-residential institutions.

Names of partly residential institutions are :—

1. Department of Chemical Technology, Bombay University, Bombay (W-1).
2. Luxminarayan Institute of Technology, Nagpur (W-2).
3. College of Engineering, Poona, (W-3).
4. Victoria Jubilee Technical Institute, Bombay (W-4).
5. Kalabhavan Technical Institute, Baroda (W-5).
6. Sir Cusrow Wadia Institute of Electrical Technology, Poona (W-6).
7. Government Engineering School, Sadar Bazar, Nagpur (W-6).
8. Brihan Maharashtra College of Commerce, Bombay (W-17).
9. Hargovan Das Luxmichand College of Commerce, Ahmedabad, Bombay (W-8).
10. Pratap Singh College of Commerce, Baroda. (W-19).
11. Ramani Ranjan Anandilal Pader College of Commerce, Matunga, Bombay. (W-20).
12. Govindram Saxeria College of Commerce, Wardha, C. P. (W-22).

Non-residential institutions are :—

1. Government Tanning Institute, Bandra, Bombay (W-7).
2. O'Brien Technical Institute, Sholapur, Bombay (W-11).
3. The R. C. Technical Institute, Ahmedabad, (W-14).

4. Government School of Industries, Satara City, Bombay (W-10).
5. F. S. Parekh Technical Institute, Chawk Bazar, Surat, Bombay (W-13).
6. School of Industries, Ratnagiri, Bombay (W-15).
7. Sir J. J. School of Arts, Bombay (W-16).

Table IV, Chapter I shows that the facilities for training in various branches of twelve subjects covering courses in Engineering, Technology, Arts, Architecture and Commerce, are available in the above institutions.

Details of the courses with other relevant information are given below :—

I. AUTOMOBILE ENGINEERING.

There are two institutions in this region offering courses in Automobile Engineering. Details are as follows :—

A.—Government Engineering School, Sadar Bazar, Nagpur.

1. Course of study with duration	A 3-year diploma course.
2. Minimum Admission qualification	High School Leaving Certificate.
3. Annual Tuition fee	Rs. 54.
4. Annual Intake	10.
5. Annual Output	Information not available.
6. Distinction awarded with recognition	Diploma is awarded by Nagpur University.
Remarks	The institution is controlled by the Central Provinces Government. One seat is reserved for backward community.

B.—The F. S. Parekh Technical Institute, Surat, Bombay.

1. Course of study with duration	A certificate course of 3 years duration.
2. Minimum Admission qualification	Vth standard of High School.
3. Annual Tuition fee	Rs. 18.
4. Annual Intake	15.
5. Annual Output	3.
6. Distinction awarded with recognition	The Certificate is awarded to successful candidates by the Director of Industries, Bombay.
Remarks	This is a Government aided institution and controlled by the Surat Municipality.

II. CHEMICAL ENGINEERING.

There are two institutions in this region offering facilities for training in Chemical Engineering as detailed below :—

A.—Department of Chemical Technology, Bombay University, Bombay.

Degree Course

1. Course of study with duration	A 2-year degree course.
2. Minimum Admission qualification	B.Sc.
3. Annual Tuition fee	Rs. 250 for Bombay students. Rs. 400 for non-Bombay students.
4. Annual Intake	16.
5. Annual Output	14.
6. Distinction awarded with recognition	B.Sc. (Tech.) degrees are awarded by Bombay University to successful candidates.

Post-Graduate Degree Course.

1. Course of study with duration	A 1-year course.
2. Minimum Admission qualification	B.Sc. (Tech.)
3. Annual Tuition fee	Rs. 60 for Bombay students, Rs. 400 for non-Bombay students.
4. Annual Intake	Not yet fixed.
5. Annual Output . . . . .	...
6. Distinction awarded with recognition	M.Sc. (Tech.) degree is awarded to successful candidates by the Bombay University.
Remarks	This institution is controlled by the Bombay University. Facilities for Researches in Chemical Engineering exist in this institution.

B.—Luxminarayan Institute of Technology, Nagpur.

1. Course of study with duration	A 2-year Degree course.
2. Minimum Admission qualification	B. Sc.
3. Annual Tuition fee	Rs. 120.
4. Annual Intake	9.
5. Annual Output	6.
6. Distinction awarded with recognition	B. Sc. (Tech.) degree awarded by the Nagpur University to successful candidates.
Remarks	The institution is under the control of the Nagpur University. Facilities for researches exist. M. Sc. (Tech.) degree in Chemical Engineering is also awarded to a candidate who successfully completes his research work after graduation from the institution. Annual tuition fees, duration etc are fixed according to the nature of the investigation.

III. CIVIL ENGINEERING

There are four institutions offering various courses in Civil Engineering as detailed below :—

A.—College of Engineering, Poona, Bombay.*Degree Course.*

1. Course of study with duration	A 3½-year course.
2. Minimum Admission qualification	I.Sc.
3. Annual Tuition fee	Rs. 300.
4. Annual Intake	105.
5. Annual Output	77.
6. Distinction awarded with recognition	B. E. degree in Civil Engineering of the Bombay University is awarded to a successful candidate who completes his degree course.

Diploma Course

1. Course of study with duration	A 3-year Diplomacourse.
2. Minimum Admission qualification	Matriculation.
3. Annual Tuition fee	Rs. 100.
4. Annual Intake	100.

5. Annual Output	43.
6. Distinction awarded with recognition	A Government Diploma is awarded to successful students. This diploma is recognised by the Public Works Department for Upper Subordinate Engineering posts.
Remarks	This institution is controlled by the Government of Bombay. The institution has got facilities for researches in material testing (Strength of materials). 35% of the seats are reserved for minority communities.

B.—Government Engineering School, Sadar Bazar, Nagpur.

1. Course of study with duration	A 3-year Diploma course.
2. Minimum Admission qualification	High School Leaving Certificate.
3. Annual Tuition fee	Rs. 54.
4. Annual Intake	30.
5. Annual Output	Information not available.
6. Distinction awarded with recognition	A Diploma of the Nagpur University is awarded to successful candidates.
Remarks	This institution is controlled by the C. P. Government and one seat is reserved for a member of the backward community.

C.—Kalabhavan Technical Institute, Baroda

1. Course of study with duration	A 4-year Diploma course.
2. Minimum Admission qualification	Matriculation.
3. Annual Tuition fee	Rs. 60 for Baroda students and Rs. 120 for outsiders.
4. Annual Intake	25.
5. Annual Output	Information not available.
6. Distinction awarded with recognition	Diplomas are awarded to successful candidates. The diploma is widely recognised by the Bombay and other Governments as equivalent to similar diplomas issued by recognised institutions of those Governments.
Remarks	This institution is controlled by Baroda State Government.

D.—Victoria Jubilee Technical Institute, Matunga, Bombay

1. Course of study with duration	A 4-year Diploma course in Civil-cum-Sanitary Engineering.
2. Minimum Admission qualification	Entrance examination of Matriculation standard held by the Institute. I.Sc. Certificate holders are exempted from the examination.
3. Annual Tuition fee	Rs. 160 for Bombay students and Rs. 220 for outsiders.
4. Annual Intake	10.
5. Annual Output	6.
6. Distinction awarded with recognition	Diplomas (L. S. E.) are awarded by a Board of the Institute to all successful candidates. The diploma is widely recognised.
Remarks	This institution is aided by the Government of Bombay and recognised as the Central Technological Institute, Bombay Province.

IV. ELECTRICAL ENGINEERING

Five institutions offer facilities for various courses in Electrical Engineering. Details are as follows :—

A.—Sir Cusrow Wadia Institute of Electrical Technology—19, Bund Garden Road, Poona, Bombay.

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|---|--|
| 1. Course of study with duration | A 3-year Diploma course in Electrical Technology. |
| 2. Minimum Admission qualification | Matriculation. |
| 3. Annual Tuition fee | Rs. 100. |
| 4. Annual Intake | 40. |
| 5. Annual Output | 22. |
| 6. Distinction awarded with recognition | A diploma (Dip. Tech.) is awarded by the Bombay Government to successful candidates. |
| Remarks | This is a private institution. Two seats are reserved for eligible Parsee students. |

B.—Kalabhavan Technical Institute, Baroda.

- | | |
|---|---|
| 1. Course of study with duration | A 4-year Diploma course. |
| 2. Minimum Admission qualification | Matriculation. |
| 3. Annual Tuition fee | Rs. 60 for Baroda students and Rs. 120 for outsiders. |
| 4. Annual Intake | 25. |
| 5. Annual Output | 86 (including students of other courses). |
| 6. Distinction awarded with recognition | A diploma is awarded by the institution to all successful candidates. The diploma is recognised by Baroda State Government and Bombay Government. |
| Remarks | This is a State controlled Institution. |

C.—Victoria Jubilee Technical Institute, Matunga, Bombay.

- | | |
|---|---|
| 1. Course of study with duration | A 4-year Diploma course, inclusive of 6 months' practical training. |
| 2. Minimum Admission qualification | An entrance examination of Matric Standard. (I.Sc. Certificate holders are exempted from this examination.) |
| 3. Annual Tuition fee | Rs. 160 for Bombay students and Rs. 220 for outsiders. |
| 4. Annual Intake | 60. |
| 5. Annual Output | 36. |
| 6. Distinction awarded with recognition | Diploma (L.E.E.) awarded to all successful candidates by the Board of the Institute. |
| Remarks | This is a Provincial Government aided institution. |

D.—Morvi Technical Institute, Morvi, Kathiawar.

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|---|---|
| 1. Course of study with duration | A 3-year Diploma course inclusive of 3 months of practical training. |
| 2. Minimum Admission qualification | VIIth standard of High School. |
| 3. Annual Tuition fee | Rs. 36. |
| 4. Annual Intake | 20 (including students of other courses offered by the institute). |
| 5. Annual Output | No information available. |
| 6. Distinction awarded with recognition | Final examination is conducted by Bombay Government and a Higher certificate is awarded to successful candidates by the same Government but diplomas are awarded by Morvi Darbar. |
| Remarks | This institution is under the control of Morvi State Government and affiliated to the Board of Technical and Industrial Training, Bombay Government. |

F.—The R. C. Technical Institute, Ahmedabad, Bombay.

1. Course of study with duration.	.	.	.	A 3-year Diploma course.
2. Minimum Admission qualification.	.	.	.	Non-Matric.
3. Annual Tuition fee	.	.	.	Rs. 144.
4. Annual Intake	.	.	.	20.
5. Annual Output	.	.	.	..
6. Distinction awarded with recognition.	.	.	.	Diplomas are awarded to successful candidates by Bombay Government.

Diploma course (part-time)

1. Course of study with duration.	.	.	.	A 4-year Diploma course (Part-time).
2. Minimum Admission qualification.	.	.	.	Non-Matric.
3. Annual Tuition fee	.	.	.	Rs. 120.
4. Annual Intake	.	.	.	10.
5. Annual Output	.	.	.	..
6. Distinction awarded with recognition	.	.	.	Diplomas are awarded to successful candidates by the Bombay Government.
Remarks	.	.	.	This is a Bombay Government controlled institute.

V. ELECTRICAL AND MECHANICAL ENGINEERING (COMBINED)

There is only one institution namely, the **College of Engineering, Poona, Bombay**, offering a Combined Electrical and Mechanical Engineering course. Details are as follows :—

Degree course

1. Course of study with duration	.	.	.	A 3½-year course.
2. Minimum Admission qualification	.	.	.	I. Sc.
3. Annual Tuition fee	.	.	.	Rs. 300.
4. Annual Intake	.	.	.	50.
5. Annual Output	.	.	.	56.
6. Distinction awarded with recognition	.	.	.	B. E. degree in Electrical and Mechanical Engineering of the Bombay University is awarded to a successful candidate.

Diploma course

1. Course of study with duration	.	.	.	A 4-year course.
2. Minimum Admission qualification	.	.	.	Matriculation.
3. Annual Tuition fee	.	.	.	Rs. 100.

4. Annual Intake	76.
5. Annual Output	20.
7. Distinction awarded with recognition .	The Diploma is awarded by the Bombay Government.
Remarks	This institution is controlled by the Government of Bombay. 35% seats are reserved for minority communities. The institution has got facilities for researches in Applied Electronics and Electrical measurements and maintains a separate Radio communication Department.

VI. MECHANICAL ENGINEERING

There are nine institutions having Mechanical Engineering courses in various branches. Details are as follows:—

A.—F. S. Parekh Technical Institute, Chawk Bazar, Surat, Bombay.

1. Course of study with duration	A 3-year certificate course.
2. Minimum Admission qualification	6th standard of High School.
3. Annual Tuition fee	Rs. 18
4. Annual Intake	15.
5. Annual Output	3.
6. Distinction awarded with recognition .	A certificate is awarded by the Board of Technical and Industrial Training, Bombay Govt. to successful candidates.
Remarks	This Institution is Government aided and controlled by the Surat Municipality.

B.—Government School of Industries, Satara, City, Bombay.

1. Course of study with duration	A certificate course in 'A' Carpentry course of 3 years' duration.
2. Minimum Admission qualification	VIIIth standard.
3. Annual Tuition fee	Nil.
4. Annual Intake	10.
5. Annual Output	Nil in 1946.
6. Distinction awarded with recognition .	A certificate is awarded by the Board of Technical and Industrial Training, Bombay Govt. to successful candidates.
Remarks	This institution is controlled by the Government of Bombay.

C.—Government Engineering School, Sadar Bazar, Nagpur.

1. Course of study with duration	A 3-year Diploma Course.
2. Minimum Admission qualification	High School Leaving Certificate.
3. Annual Tuition fee	Rs. 54.
4. Annual Intake	15.
5. Annual Output	Information not available.
6. Distinction awarded with recognition .	A Diploma of the Nagpur University is awarded to successful candidates.
Remarks	This institution is controlled by the Provincial Government. One seat is reserved for backward community.

D.—Kalabhavan Technical Institute, Baroda.

1. Course of study with duration	A 3-year Diploma Course.
2. Minimum Admission qualification	Matriculation.
3. Annual Tuition fee	Rs. 60. for Baroda students and Rs. 120 for outsiders.
4. Annual Intake	25.
5. Annual Output	86 (including students of other subject offered by the Institution.)

6. Distinction awarded with recognition . A Diploma is awarded to the successful candidates. The diploma is recognised by the Bombay and Madras Governments as equivalent to L.E.E. of Madras Government.
- Remarks This institution is controlled by Baroda State Government.

E.—Morvi Technical Institute, Morvi, Kathiawar.

1. Course of study with duration . A 3-year Diploma course inclusive of 3 months practical training.
2. Minimum Admission qualification . VIIth standard of High School.
3. Annual Tuition fee . Rs. 36.
4. Annual Intake . 20.
5. Annual Output . 6.
6. Distinction awarded with recognition . A Diploma is awarded by the Government of Morvi to successful candidates but a Higher Certificate in Mechanical Engineering is awarded by the Board of Technical and Industrial Training, Government of Bombay.
- Remarks This institution is under the control of Morvi State Government.

F.—O'Brien Technical Institute, Kolhapur, Bombay.

1. Course of study with duration . A 4-year Diploma course inclusive of one year of practical training.
2. Minimum Admission qualification . Non-Matric with Science.
3. Annual Tuition fee . Rs. 30.
4. Annual Intake . 15.
5. Annual Output . 3.
6. Distinction awarded with recognition . A Diploma is awarded by the Kolhapur State Government to successful candidates.
- Remarks This institution is controlled by Kolhapur Government.

G.—R. C. Technical Institute, Ahmedabad.

1. Course of study with duration . A 4-year Certificate course.
2. Minimum Admission qualification . Non-Matric.
3. Annual Tuition fee . Rs. 144.
4. Annual Intake . 20.
5. Annual Output . 6.
6. Distinction awarded with recognition . The certificate is awarded to the successful candidates by the Board of Technical and Industrial Training, Government of Bombay.
- Remarks This institution is controlled by the Government of Bombay.

H.—School of Industry, Ratnagiri, Bombay.

- I
1. Course of study with duration . A 2-year Certificate course in Mechanical Apprenticeship.
2. Minimum Admission qualification . 5th standard of High School.
3. Annual Tuition fee . Nil.
4. Annual Intake . 8.
5. Annual Output . 4.
6. Distinction awarded with recognition . The Certificates are awarded to successful candidates by the Government of Bombay.

II

1. Course of study with duration	A 3-year certificate course in Carpentry 'A'.
2. Minimum Admission qualification	5th standard of High School.
3. Annual Tuition fee	Nil.
4. Annual Intake	20.
5. Annual Output	—
6. Distinction awarded with recognition	The certificates are awarded to successful candidates by the Government of Bombay.
Remarks	This institution is controlled by the Government of Bombay and is more or less an institution for training of artisans.

I.—Victoria Jubilee Technical Institute, Matunga, Bombay.

Diploma course.

1. Course of study with duration	A 4-year Diploma Course.
2. Minimum Admission qualification	A qualifying examination of Matric standard, I.Sc.'s are exempted from it.
3. Annual Tuition fee	Rs. 160 for Bombay students and Rs. 220 for outsiders.
4. Annual Intake	60.
5. Annual Output	31.
6. Distinction awarded with recognition	Diplomas are awarded by the Board of the Institution.

Certificate course.

1. Course of study with duration	A 2-year certificate course (part-time).
2. Minimum Admission qualification	Matriculation.
3. Annual Tuition fee	Not known.
4. Annual Intake	80.
5. Annual Output	51.
6. Distinction awarded with recognition	Certificates are awarded by the Board of the Institution.
Remarks	This is a private institute controlled by a Board of Trust, and aided by the Bombay Government. The institute is recognised by the Government of Bombay as the Central Technological Institute in Bombay Province.

VII—LEATHER TECHNOLOGY.

Two institutions offer courses in Leather Technology. Details are as follows :—

A.—Government Leather Working Institute, Bandra, Bombay.

1. Course of study with duration	A 2-year Diploma course.
2. Minimum Admission qualification	Matriculation.
3. Annual Tuition fee	Rs. 30. for Bombay students and Rs. 200 for outsiders.
4. Annual Intake	5.
5. Annual Output	Information not available.
6. Distinction awarded with recognition	The diploma is awarded by the Bombay Government to successful candidates.
Remarks	This institution is controlled by the Bombay Government.

B.—Government Tanning Institute, Bombay.

1. Course of study with duration	A 2-year Diploma course in Tanning.
2. Minimum Admission qualification	Matriculation.
3. Annual Tuition fee	Nil for Bombay students and Rs. 200 for outsiders.
4. Annual Intake	5.
5. Annual Output	3.
6. Distinction awarded with recognition	The diploma is awarded to the successful candidates by the Board of Technical & Industrial Training, Government of Bombay.
Remarks	This institution is controlled by the Government of Bombay.

VIII—CHEMICAL TECHNOLOGY.

There are four Institutions offering courses in Chemical Technology. Details are as follows :—

A.—Department of Chemical Technology, University of Bombay.

1. Course of study with duration	A 2-year Degree course in Textile Chemistry, Pharmaceutics & Fine Chemicals, Foods and Drugs, Technology of Intermediates, Plastics, Paints & Varnishes, Oils, Fats, etc.
2. Minimum Admission qualification	B. Sc.
3. Annual Tuition fee	Rs. 250 for Bombay students and Rs. 400 for outsiders.
4. Annual Intake	16 (Textile Chemistry); 12 (Pharmaceutics and Fine Chemicals); 10 (Foods and Drugs); 12 (Technology of Intermediates); 6 and 8 in Plastics, Paints, and Varnishes and Oils & Fats, etc.
5. Annual Output	Corresponding output are 14, 9, 5, 7, 3 and 4 respectively.
6. Distinction awarded with recognition	B. Sc. (Tech.) degree of Bombay University is awarded to all successful candidates.
Remarks	This institution is directly under the control of the Bombay University. There are provisions for post-graduate and research degrees i.e., M.Sc. (Tech.) and Ph. D. for degree holders of the institution.

B.—Kalabhavan Technical Institute, Baroda.

1. Course of study with duration	A 3-year Diploma Course.
2. Minimum Admission qualification	Matriculation.
3. Annual Tuition fee	Rs. 60 for Baroda students and Rs. 120 for outsiders.
4. Annual Intake	25.
5. Annual Output	86 (including students for other courses offered by the Institution.)
6. Distinction awarded with recognition	The diploma is awarded by the institution.
Remarks	This institution is recognised by the Bombay Government, but controlled by Baroda State Government.

C.—Luxminarayan Institute of Technology, Nagpur University, Nagpur.

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|---|--|
| 1. Course of study with duration | A 2-year degree course. |
| 2. Minimum Admission qualification | B. Sc. |
| 3. Annual Tuition fee | Rs. 120. |
| 4. Annual Intake | 9. |
| 5. Annual Output | 6. |
| 6. Distinction awarded with recognition | B. Sc. (Tech.) degree of Nagpur University is awarded to a successful candidate. |
| Remarks | This institution is under the direct control of the Nagpur University. There is a provision for post-graduate degree in research i.e., M.Sc. (Tech.) for students who obtain their B. Sc. (Tech.) degree from the institution. |

D.—Victoria Jubilee Technical Institute, Matunga, Bombay.

- | | |
|---|---|
| 1. Course of study with duration | A 4-year Diploma course in Chemical Technology and Applied Chemistry. |
| 2. Minimum Admission qualification | Entrance examination of Matric standard (I.Sc. certificate holders are exempted from the examination.) |
| 3. Annual Tuition fee | Rs. 160 for Bombay students and Rs. 220 for outsiders. |
| 4. Annual Intake | 20. |
| 5. Annual Output | 14. |
| 6. Distinction awarded with recognition | The diploma (L.T.C.) is awarded by the Board of the Institute to a successful candidate. |
| Remarks | This institution is controlled by the Board of Trust of the institution. This is recognised by the Bombay Government as the Central Technological Institute of the Bombay Province. |

IX.—TEXTILE TECHNOLOGY.

There are three institutions in this region offering courses in Textile Technology. Details are as follows:—

A.—Kalabhavan Technical Institute, Baroda.

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|---|--|
| 1. Course of study with duration | A 3-year Diploma course. |
| 2. Minimum Admission qualification | Matriculation. |
| 3. Annual Tuition fee | Rs. 60 for Baroda students and Rs. 120 for outsiders. |
| 4. Annual Intake | 25. |
| 5. Annual Output | 86 (including students of other courses offered by the institute). |
| 6. Distinction awarded with recognition | The diploma is awarded by the institute. |
| Remarks | This institution is controlled by Baroda State Government and recognised by the Bombay Government. |

B.—R. C. Technical Institute, Ahmedabad, Bombay.

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| 1. Course of Study with duration | A 3-year Certificate course in Weaving and Spinning. |
| 2. Minimum Admission qualification | Non-Matric. |
| 3. Annual Tuition fee | Rs. 120. |

4. Annual Intake	40.
5. Annual Output	13.
6. Distinction awarded with recognition .	The Certificate is awarded by the Board of Technical and Industrial Training, Bombay Government, to a successful candidate.
Remarks	This institution is a Provincial Government controlled institution.

C.—Victoria Jubilee Technical Institute, Matunga, Bombay.

Degree Course.

1. Course of study with duration	A 4-year Degree course inclusive of 4 months of practical training.
2. Minimum Admission qualification	I. Sc.
3. Annual Tuition fee	Rs. 300 for Bombay students and Rs. 400 for outsiders.
4. Annual Intake	10.
5. Annual Output	Newly started.
6. Distinction awarded with recognition .	B. Sc. (Tech.) in Textiles of the Bombay University is awarded to successful candidates.

Diploma Course.

1. Course of study with duration	A 4-year Diploma course inclusive of 6 months of practical training.
2. Minimum Admission qualification	Entrance examination of Matric standard. (I. Sc. certificate holders are exempted from the examination.)
3. Annual Tuition fee	Rs. 160 for Bombay students and Rs. 220 for outsiders.
4. Annual Intake	40.
5. Annual Output	27.
6. Distinction awarded with recognition .	L. T. M. is awarded to successful candidates.

Certificate Course.

1. Course of study with duration	A 2-year Certificate course.
2. Minimum Admission qualification	Matriculation.
3. Annual Tuition fee	Rs. 45.
4. Annual Intake	80.
5. Annual Output	21.
6. Distinction awarded with recognition .	A certificate is awarded to successful candidates.
Remarks	This institution is controlled by the Board of Trust but recognised by the Bombay Government as the Central Technological Institute of Bombay Province, and aided by the Bombay Government.

X—ARTS.

There are two Institutions offering various courses in Arts. Details are as follows :—

A.—Kalabhavan Technical Institute, Baroda.

1. Course of study with duration	A 4-year diploma course in Painting.
2. Minimum Admission qualification	Matriculation.
3. Annual Tuition fee	Rs. 60 for the state students and Rs. 120 for outsiders.
4. Annual Intake	5.
5. Annual Output	86 (including students of other courses offered by the institution.)

6. Distinction awarded with recognition . The diploma is awarded by the institution to successful candidates.
 Remarks This institution is State controlled.

B.—Sir J. J. School of Arts, Bombay.

Diploma course in Drawing and Painting.

1. Course of study with duration . A 7-year course.
2. Minimum Admission qualification . Inter Drawing Certificates.
3. Annual Tuition fee . Rs. 48 to Rs. 100 for Drawing and Painting.
4. Annual Intake . 30.
5. Annual Output . 83.
6. Distinction awarded with recognition . The diploma is awarded by the institution to successful candidates.

Diploma course in Modelling.

1. Course of study with duration . A 5-year Diploma course in Modelling.
2. Minimum Admission qualification . Inter Drawing Certificates.
3. Annual Tuition fee . Rs. 40 to Rs. 100.
4. Annual Intake . 6.
5. Annual Output . Nil.
6. Distinction awarded with recognition . Diploma is awarded by the institution to successful candidates.

Diploma course in Commercial Art.

1. Course of study with duration . A 4-year Diploma course.
2. Minimum Admission qualification . Matriculation.
3. Annual Tuition fee . Rs. 60 to Rs. 100.
4. Annual Intake . 125.
5. Annual Output . 10.
6. Distinction awarded with recognition . The diploma is awarded by the institute to successful candidates.

Certificate course.

1. Course of study with duration . A 1-year Certificate course for Drawing Teachers' Certificate.
2. Minimum Admission qualification . Inter Drawing Certificates.
3. Annual Tuition fee . Rs. 60.
4. Annual Intake . 40.
5. Annual Output . 32.
6. Distinction awarded with recognition . Certificates are awarded by the institution to successful candidates.
- Remarks This institution is one of the best institutions of its kind in India, and it is controlled by the Government of Bombay.

XI.—ARCHITECTURE.

There are two Institutions offering courses in Architecture. Details are as follows :—

A.—Kalabhavan Technical Institute, Baroda.

1. Course of study with duration . A 4-year diploma course.
2. Minimum Admission qualification . Matriculation.
3. Annual Tuition fee . Rs. 60 for Baroda State students and Rs. 120 for outsiders.
4. Annual Intake . 5.
5. Annual Output . 86 (total output of the institution).

6. Distinction awarded with recognition . The diploma is awarded to a successful candidate by the institution.

Remarks This institution is State Controlled.

B.—Sir J. J. School of Arts, Bombay.

1. Course of study with duration . A 5-year Diploma course in Architecture.
 2. Minimum Admission qualification . Matriculation.
 3. Annual Tuition fee Rs. 60 to Rs 150 ; (60 ; 80 ; 100 ; 105 ; and 150 in 1st., 2nd., 3rd., 4th. and 5th. years respectively).

4. Annual Intake. 30.

5. Annual Output 4.

6. Distinction awarded with recognition . The diploma is awarded by the Bombay Government.

Remarks This is one of the best institutions in India, offering a course in Architecture. This institution is controlled by the Bombay Government.

XII—COMMERCE

There are six institutions offering courses in commerce, as detailed below :—

A.—Brihan Maharashtra College of Commerce, Poona, Bombay.

Degree course.

1. Course of study with duration . A 4-year degree course.
 2. Minimum Admission qualification . Matriculation.
 3. Annual Tuition fee Rs. 200.
 4. Annual Intake 170.
 5. Annual Output 60.
 6. Distinction awarded with recognition . B. Com. Degree of the Bombay University is awarded to successful candidates.

Post-Graduate degree course.

1. Course of study with duration . A 2-year course.
 2. Minimum Admission qualification . B. Com.
 3. Annual Tuition fee }
 4. Annual Intake } Information not available.
 5. Annual Output }
 6. Distinction awarded with recognition . M. Com. Degree by the Bombay University is awarded to successful candidates.

Remarks This institution is controlled by the Deccan Education Society and affiliated to the Bombay University.

B.—Govindram Saxeria College of Commerce, Wardha, Central Provinces.

1. Course of study with duration . A 2-year degree course.
 2. Minimum Admission qualification . I. Com. or equivalent.
 3. Annual Tuition fee Rs. 125.
 4. Annual Intake 103.
 5. Annual Output 37.
 6. Distinction awarded with recognition . B. Com. Degree is awarded by the Nagpur University to a successful candidate.

Remarks This is a private institution and affiliated to the Nagpur University.

C.—Govindram Saxeria College, Nagpur, Central Provinces.

- | | |
|---|---|
| 1. Course of study with duration | A 2-year degree course. |
| 2. Minimum Admission qualification | I. Com. or equivalent. |
| 3. Annual Tuition fee | No information available. |
| 4. Annual Intake | 145. |
| 5. Annual Output | Newly started. |
| 6. Distinction awarded with recognition | B. Com. Degree of the Nagpur University will be awarded to the successful candidates. |
| Remarks | A private institution and affiliated to the Nagpur University. |

D.—Hargovandas Luxmichand College of Commerce, Ahmedabad, Bombay.

Degree course.

- | | |
|---|--|
| 1. Course of study with duration | A 4-year course. |
| 2. Minimum Admission qualification | Matriculation. |
| 3. Annual Tuition fee | Rs. 200. |
| 4. Annual Intake | 275 (total for both the courses—Degree and Post-Graduate degree). |
| 5. Annual Output | 63. |
| 6. Distinction awarded with recognition | B. Com. Degree of the Bombay University is awarded to successful candidates. |

Post-Graduate course.

- | | |
|---|--|
| 1. Course of study with duration | A 2-year course. |
| 2. Minimum Admission qualification | B. Com. |
| 3. Annual Tuition fee | Rs. 200. |
| 4. Annual Intake | 275 (total in both the courses—Degree and Post-Graduate degree). |
| 5. Annual Output | No information available. |
| 6. Distinction awarded with recognition | M. Com. Degree of Bombay University is awarded to successful candidates. |
| Remarks | This is a private institution controlled by the Ahmedabad Education Society and affiliated to the Bombay University. |

E.—Pratapsingh College of Commerce, Baroda.

Degree course.

- | | |
|---|--|
| 1. Course of study with duration | A 2-year course |
| 2. Minimum Admission qualification | I. Com. |
| 3. Annual Tuition fee | } Details are not available. |
| 4. Annual Intake | |
| 5. Annual Output | |
| 6. Distinction awarded with recognition | B. Com. Degree of Bombay University is awarded to successful candidates. |

Post-Graduate course.

- | | |
|---|---|
| 1. Course of study with duration | A 2-year course. |
| 2. Minimum Admission qualification | B. Com. |
| 3. Annual Tuition fee | } Details are not available. |
| 4. Annual Intake | |
| 5. Annual Output | |
| 6. Distinction awarded with recognition | M. Com. Degree of Bombay University is awarded to successful candidates. |
| Remarks | This institution is controlled by the Government of Baroda and affiliated to the Bombay University. |

F.—Ramani Ranjan Anandilal Poder College of Commerce and Economics, Matunga, Bombay.

Degree course.

- | | |
|---|---|
| 1. Course of study with duration . . . | A 2-year course. |
| 2. Minimum Admission qualification . . . | I. Com. |
| 3. Annual Tuition fee | } Details are not available. |
| 4. Annual Intake | |
| 5. Annual Output | |
| 6. Distinction awarded with recognition . . . | B. Com. Degree of the Bombay University awarded to successful candidates. |

Post-Graduate course.

- | | |
|---|--|
| 1. Course of study with duration . . . | A 2-year course. |
| 2. Minimum Admission qualification . . . | B. Com. |
| 3. Annual Tuition fee | } Details are not available. |
| 4. Annual Intake | |
| 5. Annual Output | |
| 6. Distinction awarded with recognition . . . | M. Com. Degree of the Bombay University is awarded to successful candidates. |
| Remarks | This institution is controlled by the Shiksha Prasarana Mandali and affiliated to the Bombay University. |

APPENDIX ' A '.

Questionnaire : (First Series)*Survey of the Institution as a whole**Name of Institution :**Full Address :—**Name, Designation, and Address of the present Head of the Institution :—**Name and designation of the Officer submitting completed Questionnaire :—**I. A brief history of the Institution :—**II. Main branches of study leading to Degree and/or Diploma :—*

<i>Degree</i>						<i>Diploma</i>					
1.	.	.	.	.	.	1.	.	.	.	.	.
2.	.	.	.	.	.	2.	.	.	.	.	.
3.	.	.	.	.	.	3.	.	.	.	.	.
4.	.	.	.	.	.	4.	.	.	.	.	.
5.	.	.	.	.	.	5.	.	.	.	.	.
6.	.	.	.	.	.	6.	.	.	.	.	.

III. Name of Departments of the Institution :—

1.	.	.	.	.	.	6.	.	.	.	.	.
2.	.	.	.	.	.	7.	.	.	.	.	.
3.	.	.	.	.	.	8.	.	.	.	.	.
4.	.	.	.	.	.	9.	.	.	.	.	.
5.	.	.	.	.	.	10.	.	.	.	.	.

IV. Organisation and Administration :—

(a) *Final Administrative Authority :—*

(b) *Governing Body, if any, its composition and powers :—*

(c) *Council or Committee for Internal Administration, if any, its composition and powers :—*

(d) *Financial Power of the Head of the Institution :—*

(e) *Financial Power of the Head of a Department :—*

(f) *Type of organisation, i.e., whether Government controlled, Government aided, privately endowed, or controlled by Municipality. State denomination if Institution is denominational. Also state the proportion of student seats reserved for any one or more communities :—*

V. Division of Responsibility and Authority :—

	Final Authority	Semi-Final Authority	Nomination, proposal or initiative
(a) Appropriations— (i) Institution as a whole.. (ii) Departments (b) Budgets— (i) Salaries (ii) Departmental Equip- ment. (iii) Research (c) Administration and Policy— (i) Appointments of teach- ing staff. (ii) Promotions of teaching staff. (iii) Educational Policies (iv) Curricula and courses of study. (v) Particular Admission Requirements for each Department. (vi) Institutional admission Requirements.			

VI. Value of Physical Facilities and Basis of Valuation :—

	Effective Floor area	Value in Rupees and Basis of Valuation
Buildings :— (i) Instructional		
(ii) Residential (Staff)		
(iii) Residential (Students)		
(iv) Residential (Others)		

Equipment :—(Value in rupees) and Basis of Valuation
(i.e., whether book value or present market value or any other basis).

VII. Annual Income :—

Amount in Rupees.

(From)	in	1938-39	1945-46
1. Tuition fees		
2. Other student fees for Instruction		
3. Endowment		
4. Grant from Central Government		
5. Grant from Provincial Government		
6. Grant from Local Bodies		
7. Voluntary Public Support		
8. Other Sources		
TOTAL		

Amount in Rupees

VIII. Annual Expenditure.

1. On salaries to :—

(a) Administrative and office staff . . . . .	.	.
(b) Teaching staff . . . . .	.	.
(c) Other staff . . . . .	.	.

2. On Equipment :—

(a) New . . . . .	.	.
(b) Replacement . . . . .	.	.

3. On Research and Development :—

4. On Library :—

5. Contingencies :—

(a) Travelling and other allowances . . . . .	.	.
(b) Municipal charges . . . . .	.	.
(c) Power & consumable stores . . . . .	.	.
(d) Other Contingencies . . . . .	.	.

Total Recurring Expenditure

IX. Capital Expenditure on Equipment and Buildings :—

1937.	Rs.	1942.	Rs.
1938.	Rs.	1943.	Rs.
1939.	Rs.	1944.	Rs.
1940.	Rs.	1945.	Rs.
1941.	Rs.	1946.	Rs.

Total over 10 years above Rs.

X.	1934-35	1938-39	1945-46	Present.
(a) Number applying for admission
(b) Total strength of the student body
(c) (i) Number passing out with Degree.
(ii) Number passing out with Diploma.
d) Total strength of wholtime teaching staff.
(e) Total strength of part-time or Honorary staff.
(f) Total strength of Administrative and Ministerial staff.
(g) Total strength of the other staff

XI. Salaries of Administrative and other staff:—

- (a) The head of the Institution :
Minimum qualification prescribed for the post :
- (b) Registrar, if any
- (c) Practical Training Officer, if any :
Minimum qualifications prescribed for the post :
- (d) Workshop Superintendent, if any :
Minimum qualifications prescribed for the post .
- (e) Librarian .
- (f) Medical Officer (wholtime or part-time).
- (g) Physical Instructor .
- (h) Ministerial Staff :
- (i) .
- (ii) .
- (iii) .
- (i) Inferior Staff for College (Peons, Bearers, etc.)

Salary Scale

Present Pay

- XII. (a)** Number of student working days per year.....
excluding Examination periods
- (b)** Number of holidays per year.....
- (c)** Number of days spent on Annual or Periodical Examinations.....

XIII. Central Library of the Institution :—

- Floor Area.....
- Number of volumes : Books.....
- Number of volumes : Journals.....
- Number of Journals subscribed.....
(Please supply list separately)
- Annual Expenditure : Books— Rs.....
- Journals— Rs.....
- Average number of students using the Library every day.....
- Number of Books issued per year.....
- Period during which the Library is open daily.....
- Present value of Library Rs.....

XIV. Employment of passed students :—

- (a) Whether employment register is maintained ?.....
- (b) If so, how many employed on the register ?.....
- (c) Type of employment for which students passing out of the Institution are qualified :.....
- (d) List of distinguished alumni:

XV. Plans (such as strengthening of the existing Departments or extending their scope, if any, for development with objective and financial implication. Sources and Extent of financial assistance expected for development period over which the development is to take place. Please submit a short memorandum in which please state in stages the requirements (for development) such as :—

1. Additional Equipment with list and estimated cost thereof.
2. Additional class room accommodation.
3. Additional Laboratory accommodation.
4. Additional Drawing Office accommodation.
5. Additional Workshop accommodation.
6. Student Hostel accommodation.
7. Staff Quarters.
8. Teaching Staff, etc.
9. Other Staff.
10. Student Amenities.

QUESTIONNAIRE : (SECOND SERIES)

Survey of a Department of an Institution

Name of the Institution :—

Name of the Department of the Institution

I. List of Subjects taught by the Department :—

- | | |
|---------|----------|
| 1. | 7. |
| 2. | 8. |
| 3. | 9. |
| 4. | 10. |
| 5. | 11. |
| 6. | 12. |

II. Instructional and other staff of the Department, their pay and prospects :—

Designation	No.	Present salary scale	Average salary at present drawn	Maximum salary at present drawn by any	Minimum salary at present drawn by any
Professor					
Asstt. Professor					
Senior Lecturer					
Lecturer					
Demonstrator					
Instructor					
Part-time or Visiting Lecturer.					
Workshop Supdt.					
Workshop Instructor					
Ministerial Staff					
Other Staff					

III. Teaching Load on the Department :—

Number of Hours.

	Per Week	Per Session
Lectures (L)
Laboratory (Lab)
Drawing (Drg)
Tutorial (T)
Practical (P)
Supervision (S)
Total (TL)

IV. Number of hours of work on a teacher per week.

Designation	L	Lab.	Drg.	T	P	S	TL
Professor							
Assistant Professor							
Senior Lecturer							
Lecturer							
Demonstrator							
Instructor							
Workshop Supdt.							
Workshop Instructor							

V. Concerning Improvement of Teaching Qualities.

(a) Research facilities, if any : _____

Is Research obligatory ? _____

(b) Industrial Refresher facilities, if any _____

Is it obligatory ? _____

(c) Academic Refresher facilities, if any _____

Is it obligatory ? -- _____

(d) Is private practice permitted? _____

If so, whether to all teachers or to some : (Please state Designation of teachers who are permitted) _____

If permitted, under what conditions? _____

(e) Are teachers permitted to undertake private tuition? _____

If so, which grade of teachers and under what conditions? _____

(f) Extra academic duties, if any, of a teacher _____

VI. Qualifications of Teachers :—

	Foreign Universities	Indian Universities
Number of teachers with a Doctor's Degree .		
Number of teachers with a Master's Degree .		
Number of teachers with a Bachelor's Degree .		
Number of teachers with a Diploma		

Number of teachers connected with Professional Associations.

(Such as Institutions of Mech. Engineers, Civil Engineers, Electrical Engineers, etc. Number to be given Professional Institutionwise and grade of membership stated)

Number of teachers with Teacher's Training Diploma _____

Number of teachers having three years or more of Industrial or Business experience _____

Number of teachers having five years or more of Industrial or Business experience _____

Number of teachers having ten years or more of Industrial or Business experience _____

VII. Further Particulars concerning teachers :—

Name.....Designation.....General Education—
Technical Education—Industrial and Business Experience—Research Quali-
fication—Previous Posts held—Connection with Professional Associations—Number
of years engaged in teaching.

VIII. Departmental Accommodation :—

(A)—Class rooms (to be placed in groups of equal floor-area)

Group	No. of rooms in a group	Floor Area (ft ²)		No. of Student Seats	
		Each room	Group Total	Each room	Group Total
1.					
2.					
3.					
4.					
5.					

(B)—Drawing Offices

Group	No. in a group	Floor Area (ft ²)		Student Seats	
		Each D. Office	Total Group	Each D. Office	Total Group
1.					
2.					
3.					
4.					

(C)—Laboratories and Workshops

Name of Laboratory or workshop	Floor Area (ft ²)	Capacity (No. of Students at a time)
1. _____		
2. _____		
3. _____		
4. _____		
5. _____		
6. _____		
7. _____		
8. _____		

(D)*—Sub-Library*Floor Area in ft² _____

Number of volumes _____

Whether Students have free access _____

(E)*—Staff Rooms*Floor Area in ft²

1.

2.

3.

Total Area (ft²) _____(F) *- Store Rooms*Floor Area in ft²

1.

2.

3.

Total Area (ft²) _____IX. *Annual Expenditure of Department :—*

(Average year)

(a) Purchase of new equipment . . . Rs. _____

(b) Replacement of equipment . . . Rs. _____

(c) Consumable Stores . . . Rs. _____

(d) Sub-Library Rs. _____

X. *Capital Value of :—*

(a) Laboratory Equipment (excluding furniture) Rs. _____

(b) Workshop Equipment (excluding furniture) . Rs. _____

(c) Furniture, etc. Rs. _____

XI. *List of important items of Laboratory/Workshop equipment :—*

QUESTIONNAIRE : (THIRD SERIES)

*Survey of a Branch of Study in an Institution**Name of Institution :—**Branch of Study :—*

	Degree 1	Diplo- ma 2	Associa- te- ship 3	Certifi- cate 4	A Course 5	Research Degree 6
<i>I.</i>						
(a) Duration of course of study inclusive of the period of training outside the Institution, if any
(b) Duration of such training
(c) Is this training continuous ?
(d) Is this training supervised by Institution staff ?
(e) Is post-graduate practical training obligatory for award of diploma ?
(f) If so, the length of such training
(g) Is this training supervised ?
(h) Abbreviations used, if any, to denote Degrees, Diplomas, etc.
(i) Posts for which the training fits them, whether executive, supervisory or craftsmen
<i>II. Admission Qualifications (Minimum) :—</i>						
Educational
Physical Fitness
Aptitude Test, if any
Entrance Test, if any
Pre-entry practical experience obligatory or not
Special considerations, if any
<i>III.</i>						
(a) Number of new admissions to 1 year class
(b) No. of applicants for admission Number of seats reserved for :—
(c) Other Provinces or States
(d) Muslims
(e) Scheduled Caste
(f) Other backward communities

	1	2	3	4	5	6
<i>ent h :—</i>						
(a) 1st year class						
(b) 2nd year class						
(c) 3rd year class						
(d) 4th year class						
(e) 5th year class						
<i>V. Number passed out in :—</i>						
(a) 1938						
(b) 1945						
(c) 1946						
<i>VI. Distribution of student's working hours:—</i>						
(a) Number of working hours per week						
(b) Number of working hours per academic session						
Number of hours per week spent on :—						
(c) Lecture work						
(d) Drawing office						
(e) Laboratories						
(f) Tutorials						
(g) Workshops						
(h) Compulsory physical training or games						
(i) Military training						
<i>VII.</i>						
Annual Tuition Fees						
Additional Laboratory Fee						
Annual Games Fee						
Annual Class Examination Fee						
Class Final Examination Fee						
Other Charges						
Average annual expenditure on books per student						
Average annual expenditure on stationery per student						

VIII. Curricula of Study and Time devoted to each Subject

L = Lectures.

LDF = Laboratory, Drawing, Field work.

T = Tutorial

TL = Total.

1 Class	2 Subjects	3 Number of hours per week			
		L (a)	T (b)	LDF (c)	TL (d)
1st year	1. _____				
	2. _____				
	3. _____				
	4. _____				
	5. _____				
	6. _____				
	7. _____				
	8. _____				
2nd year	1. _____				
	2. _____				
	3. _____				
	4. _____				
	5. _____				
	6. _____				
	7. _____				
	8. _____				
3rd year	1. _____				
	2. _____				
	3. _____				
	4. _____				

1	2	3 (a)	3 (b)	3 (c)	3 (d)
3rd year contd.	5. _____				
	6. _____				
	7. _____				
	8. _____				
4th year	1. _____				
	2. _____				
	3. _____				
	4. _____				
	5. _____				
	6. _____				
	7. _____				
	8. _____				
5th year	1. _____				
	2. _____				
	3. _____				
	4. _____				
	5. _____				
	6. _____				
	7. _____				
	8. _____				

Questionnaire (Fourth series)

Survey of Student Amenities

Name of Institution :—

Is it a Residential Institution ?

I. Lodging Facilities :—

(a) Number of Hostel seats (Bed-study)

(b) Floor Area per student

(c) Whether furnished ? If so list of furniture....

(d) Capital value of Furniture :—

II. Messing Facilities :—

(a) Number of messes

(b) Number of students in each mess.....

(c) Whether managed by students or contractor.....

(d) Supervision, if any.....

(e) Average monthly messing cost.....

(f) Cost of Teas and Breakfast, if not included in (e).....

III. Medical Facilities :—

(a) Whether there is any periodical Medical Examination ?.....

(b) Residential Medical Staff, if any.....

(c) Hospital facilities, whether free

(d) Is there any Isolation Ward !

IV. Facilities for Games and Sports :—

(a) Sports pavilion, if any (Size)

(b) Gymnasium, if any (Size)

(c) Number of playing fields

(d) Number of Tennis courts, etc.

(e) Number of P. T. Instructors, if any

(f) Number of Games Instructors, if any

V. Extra Curricular Activities :—

(a) List of Students' Associations or Societies

(b) Magazine published, if any

(c) Social Activities, if any

ADDENDA

(A) LIST OF TECHNICAL INSTITUTIONS DETAILS CONCERNING WHICH WERE NOT AVAILABLE IN TIME FOR INCLUSION IN THIS PAMPHLET.

Northern Region :—

ENGINEERING AND TECHNOLOGY :

Group ' B ' Institutions.

1. Birla Engineering College, Pilani, Rajputana.

Group ' C '

- (1) Ishwardas Technical Institute, Bahjoi, Moradabad, U. P.

II—COMMERCE :

Group ' A ' Institutions.

- (1) Maharaja's College, Jaipur.

Eastern Region :—

ENGINEERING AND TECHNOLOGY :

Group ' C ' Institutions.

- (1) Bengal Tanning Institution, Canal South Road, Tangra, Calcutta.

Western Region :—

I. ENGINEERING AND TECHNOLOGY :

Group ' B ' Institutions.

- (1) Government Engineering College of C. P. and Berar, Jabbalpur, C. P.
- (2) School of Radio Physics and Electronics, S. P. College, Poona 2, Bombay.
- (3) New Engineering College, Sangli, Bombay.

Group ' D ' Institutions.

- (1) The Mohammed Haji Saboo Siddik Institution, Byculla, Bombay.

II. COMMERCE :

Group ' A ' Institution.

- (1) Sydenham College of Commerce and Economics, Bombay.

(B) FURTHER LIST OF TECHNICAL INSTITUTIONS (DETAILS NOT YET AVAILABLE)

Northern Region :—

- (1) Hewett Engineering School, Lucknow.
- (2) Department of Commerce, Lucknow University, Lucknow.
- (3) Department of Commerce, Allahabad University, Allahabad.

Eastern Region :—

- (1) Balasore Technical School, Balasore, Orissa.

Western Region :—

- (1) Khalsa College Technical Institute, Kings Circle, Bombay.
- (2) Municipal Technical School, Sholapur.
- (3) The Abdulla Fazalbhoy Technical Institute, Bombay.
- (4) Victoria Jubilee Technical High School, Poona.
- (5) Victoria Jubilee Municipal Technical School, Poona.
- (6) The Textile Technical School, Parel, Bombay.
- (7) Technical School, Junagadh, Kathiawar.

Southern Region :—

- (1) P.S.G. & Sons Institute, Coimbatore.
- (2) Arthur Hope Polytechnic, Avanashi Road, Coimbatore.
- (3) Sri Ramakrishna Industrial School, Madras.
- (4) Instrument Mechanic Training Centre for Ex-servicemen, Kadambakkam.
- (5) Chengalvaraya Naicker's Technical Institute, Vepery, Madras.